

Figure 1

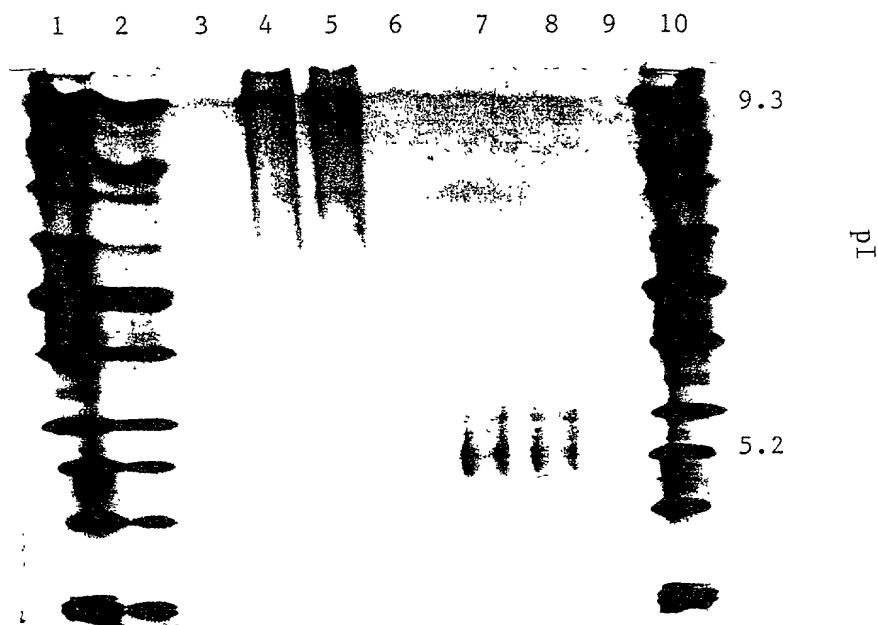


Figure 2

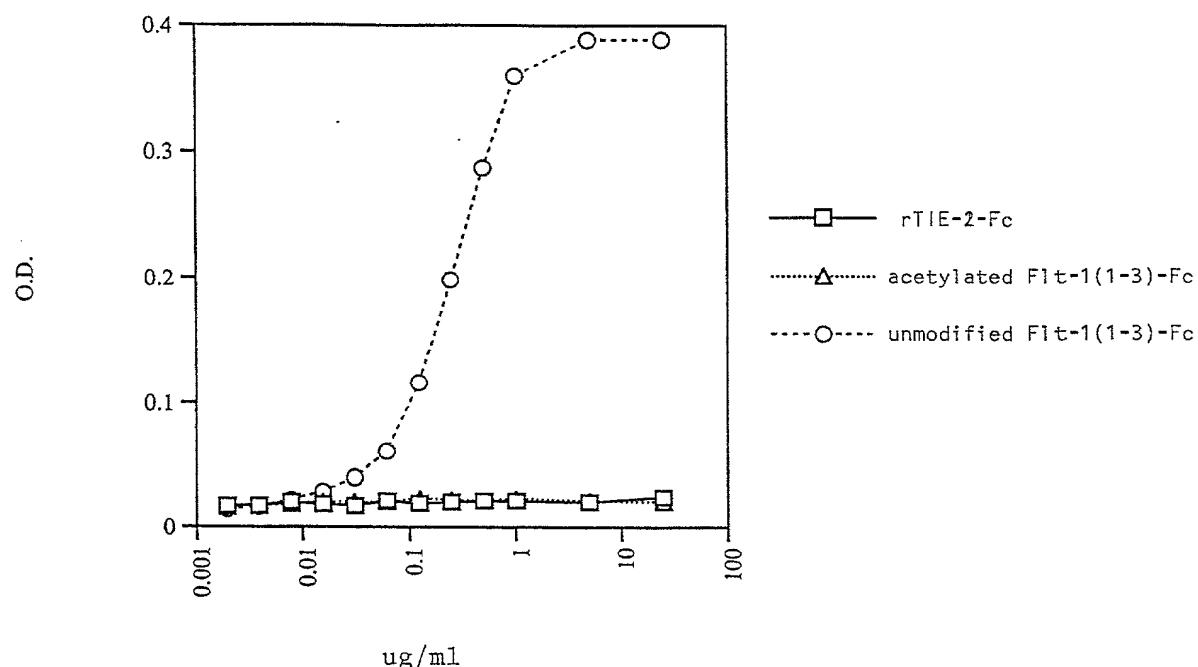


Figure 3

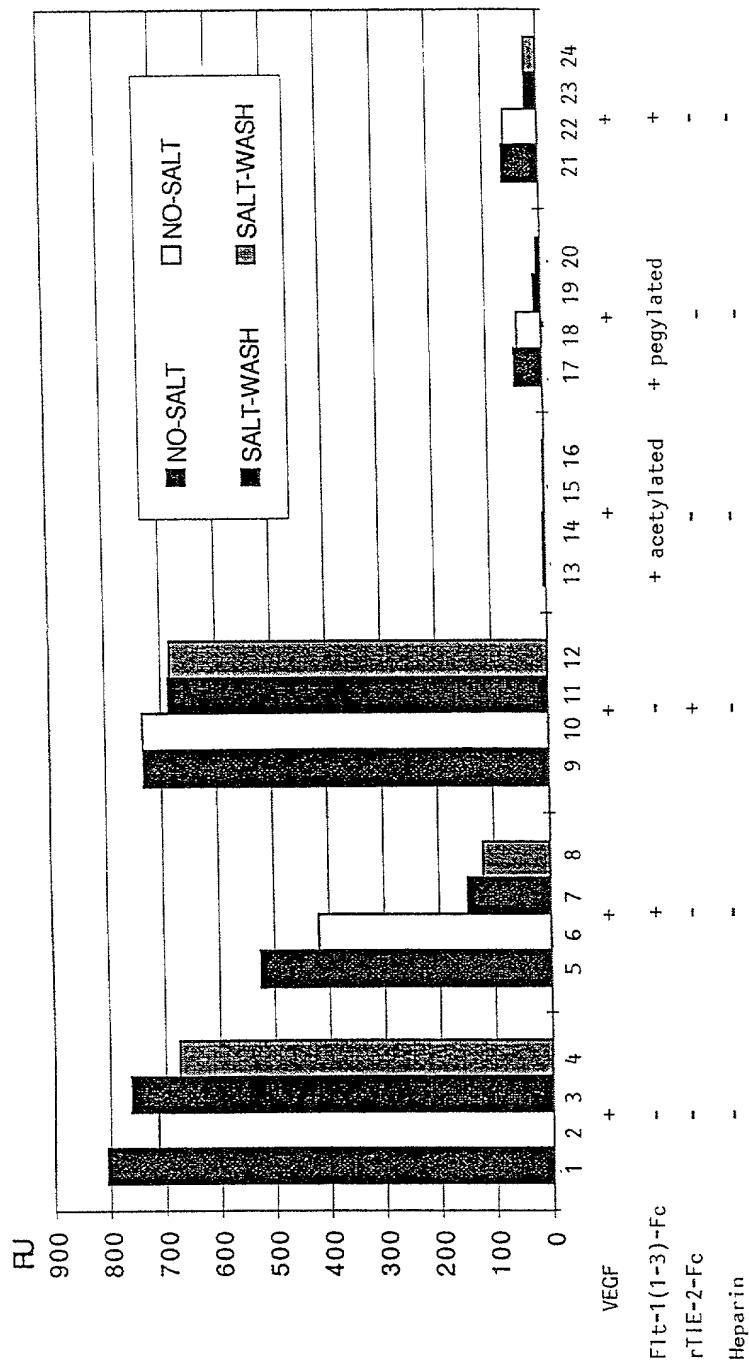


Figure 4

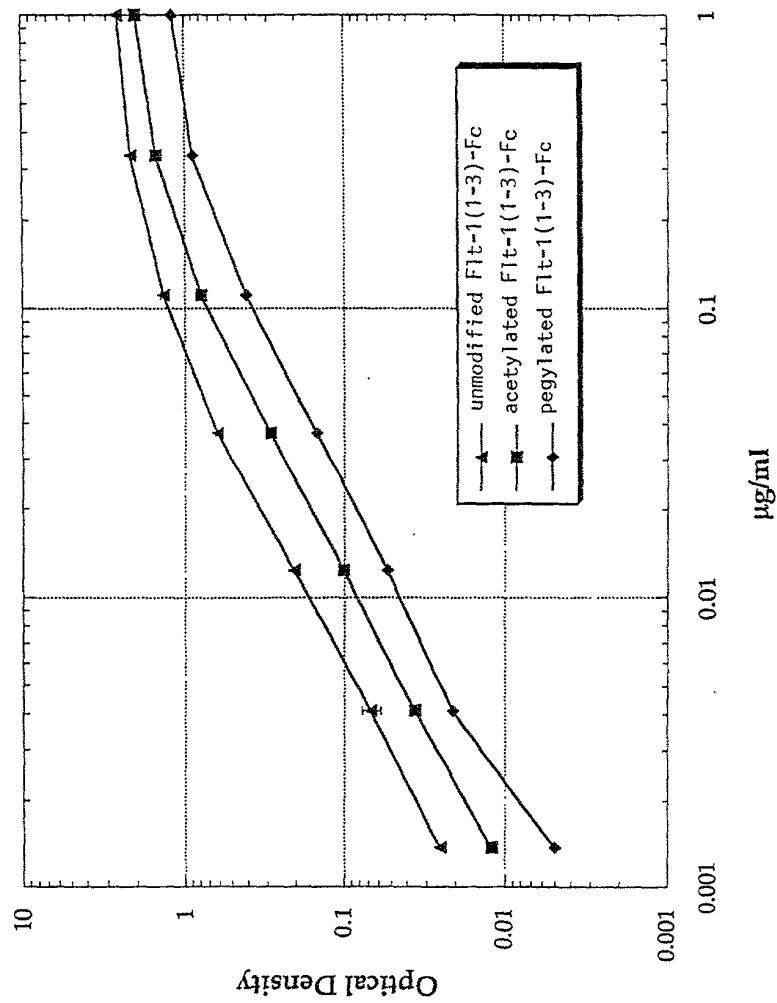


Figure 5

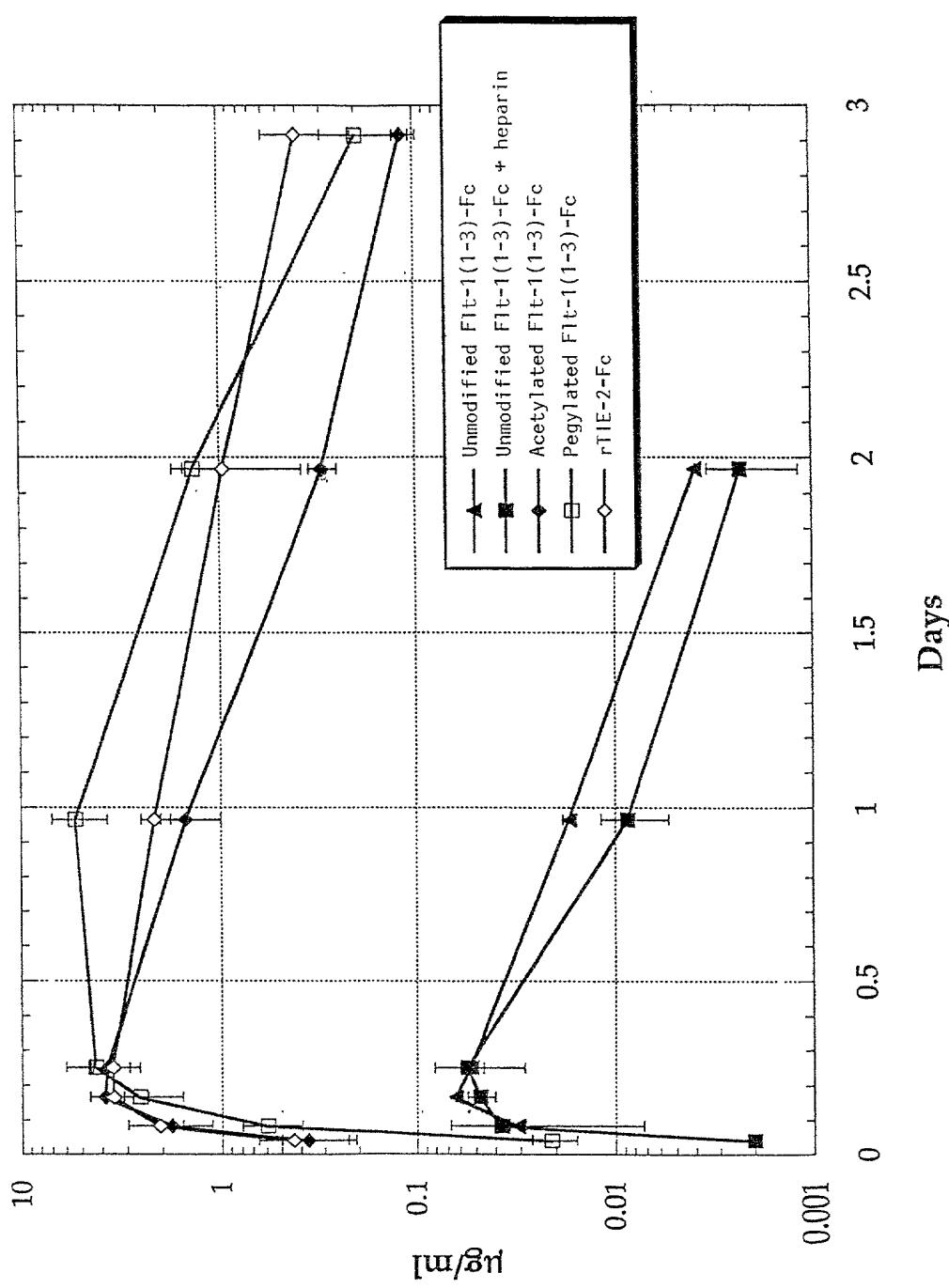


Figure 6A

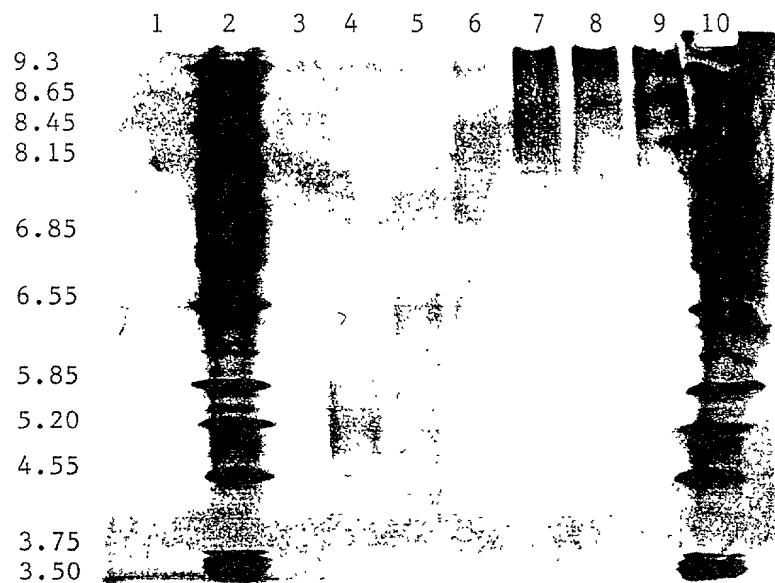


Figure 6B

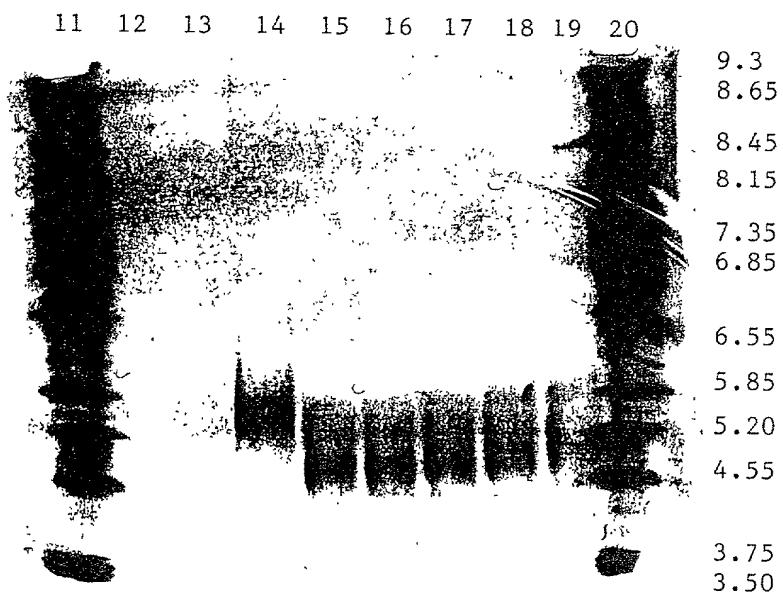


Figure 7

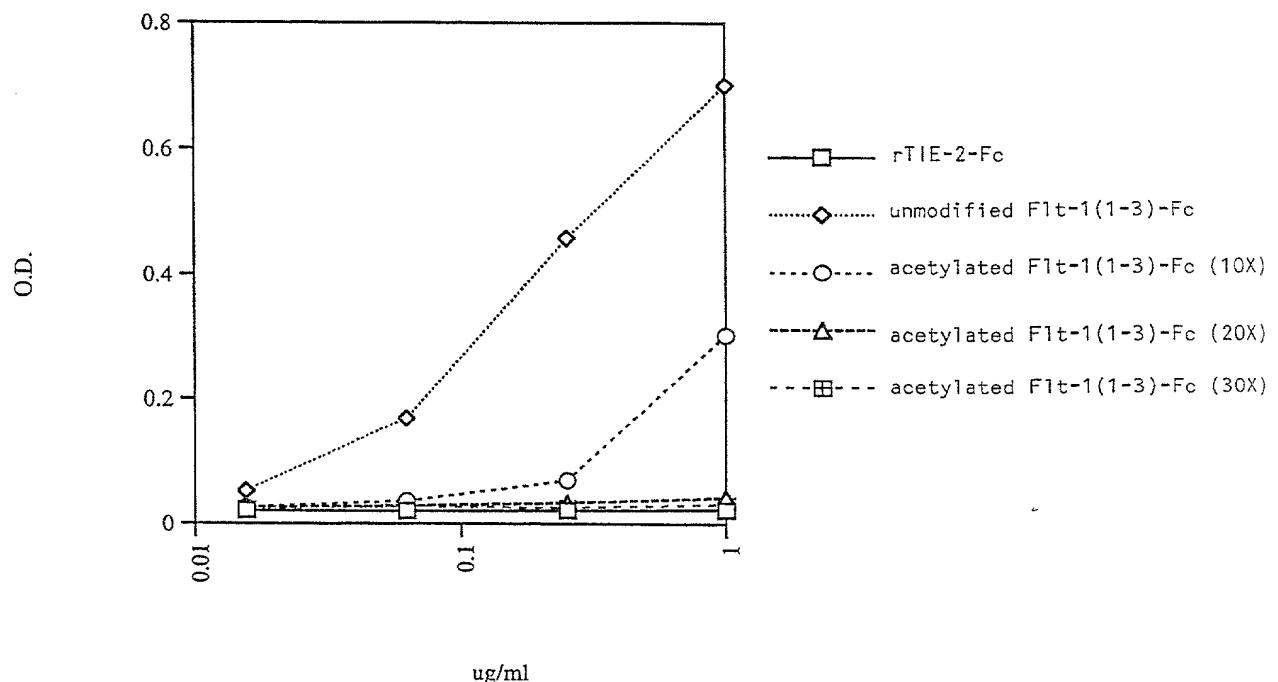


Figure 8

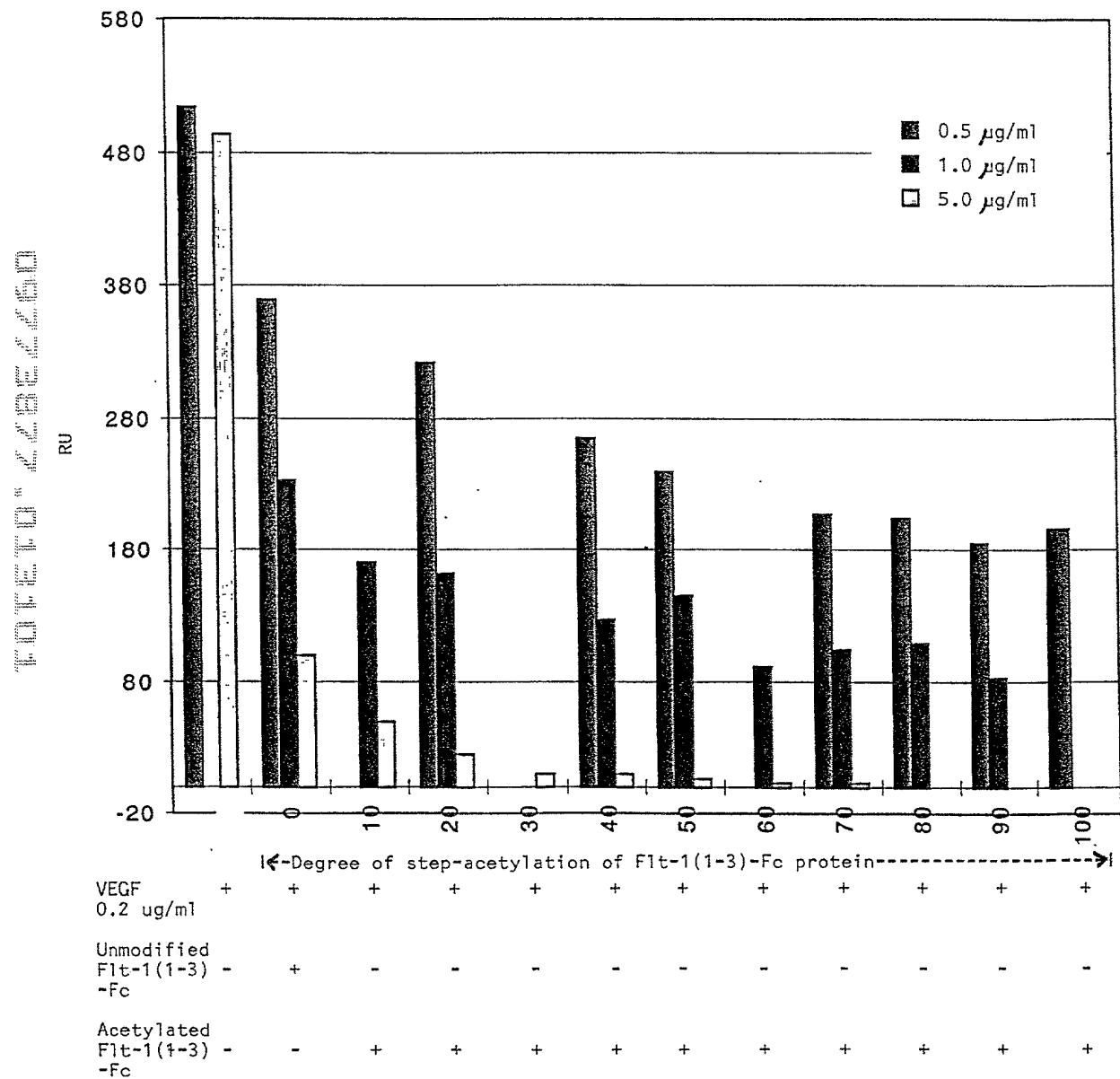


Figure 9

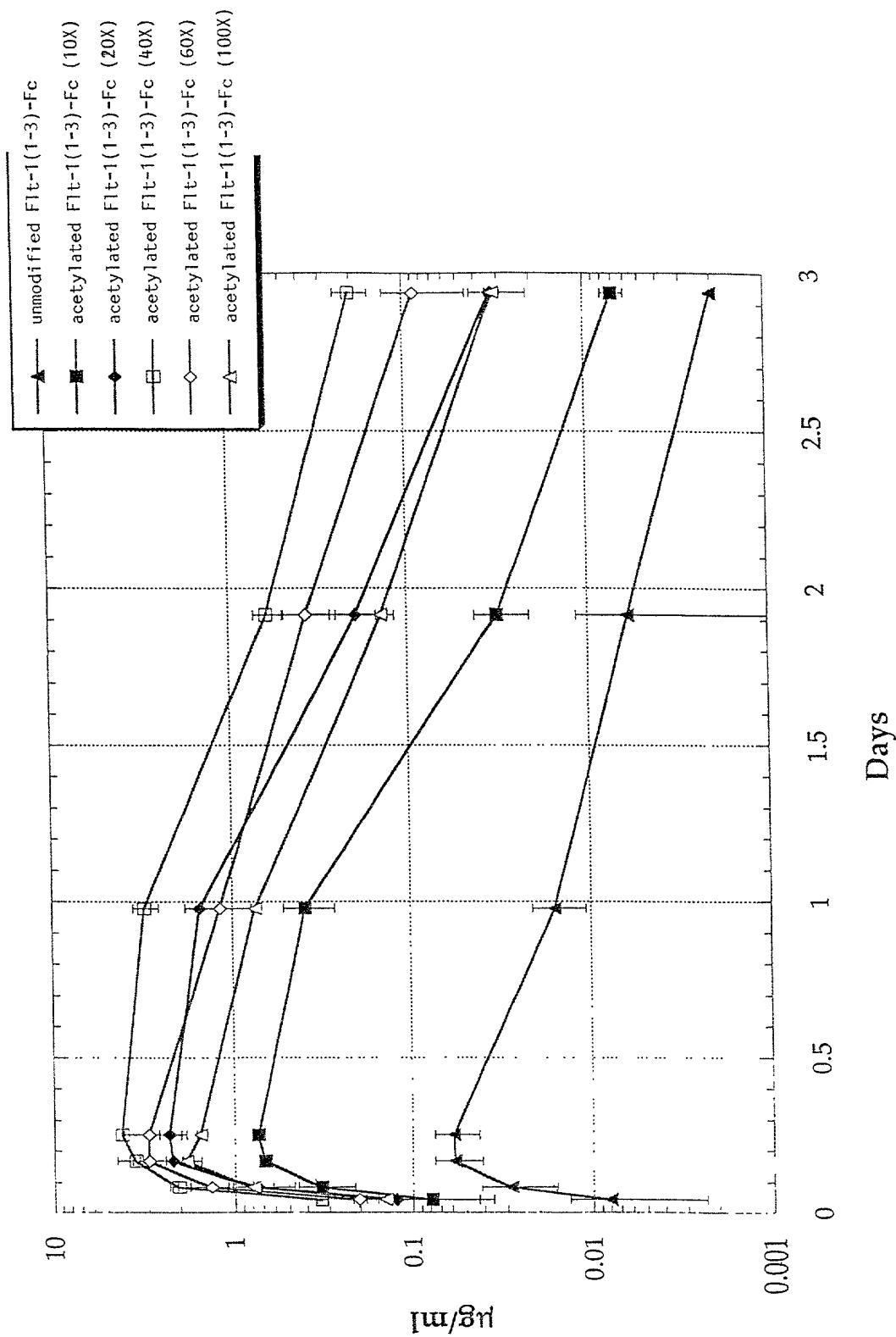


Figure 10A

\*      10      20      30      40      50      60

ATG GTC AGC TAC TGG GAC ACC GGG GTC CTG CTG TGC GCG CTG CTC AGC TGT CTG CTT CTC  
TAC CAG TCG ATG ACC CTG TGG CCC CAG GAC GAC CGC GAG TCG ACA GAC GAA GAG  
Met Val Ser Tyr Trp Asp Thr Gly Val Leu Leu Cys Ala Leu Leu Ser Cys Leu Leu>

\*      70      80      90      100      110      120

ACA GGA TCT AGT TCA GGT TCA AAA TTA AAA GAT CCT GAA CTG AGT TTA AAA GGC ACC CAG  
TGT CCT AGA TCA AGT CCA AGT TTT AAT TTT CTA GGA CTT GAC TCA AAT TTT CCG TGG GTC  
Thr Gly Ser Ser Gly Ser Lys Leu Lys Asp Pro Glu Leu Ser Leu Lys Gly Thr Gln>

\*      130      140      150      160      170      180

CAC ATC ATG CAA GCA GGC CAG ACA CTG CAT CTC CAA TGC AGG GGG GAA GCA GCC CAT AAA  
GTG TAG TAC GTT CGT CCG GTC TGT GAC GTA GAG GTT ACG TCC CCC CTT CGT CGG GTA TTT  
His Ile Met Gln Ala Gly Gln Thr Leu His Leu Gln Cys Arg Gly Glu Ala Ala His Lys>

\*      190      200      210      220      230      240

TGG TCT TTG CCT GAA ATG GTG AGT AAG GAA AGC GAA AGG CTG AGC ATA ACT AAA TCT GCC  
ACC AGA AAC GGA CTT TAC CAC TCA TTC CTT TCG CTT TCC GAC TCG TAT TGA TTT AGA CGG  
Trp Ser Leu Pro Glu Met Val Ser Lys Glu Ser Glu Arg Leu Ser Ile Thr Lys Ser Ala>

\*      250      260      270      280      290      300

TGT GGA AGA AAT GGC AAA CAA TTC TGC AGT ACT TTA ACC TTG AAC ACA GCT CAA GCA AAC  
ACA CCT TCT TTA CCG TTT GTT AAG ACG TCA TGA AAT TGG AAC TTG TGT CGA GTT CGT TTG  
Cys Gly Arg Asn Gly Lys Gln Phe Cys Ser Thr Leu Thr Leu Asn Thr Ala Gln Ala Asn>

\*      310      320      330      340      350      360

CAC ACT GGC TTC TAC AGC TGC AAA TAT CTA GCT GTA CCT ACT TCA AAG AAG AAG GAA ACA  
GTG TGA CCG AAG ATG TCG ACG TTT ATA GAT CGA CAT GGA TGA AGT TTC TTC CTT CTT TGT  
His Thr Gly Phe Tyr Ser Cys Lys Tyr Leu Ala Val Pro Thr Ser Lys Lys Glu Thr>

\*      370      380      390      400      410      420

GAA TCT GCA ATC TAT ATA TTT ATT AGT GAT ACA GGT AGA CCT TTC GTA GAG ATG TAC AGT  
CTT AGA CGT TAG ATA TAT AAA TAA TCA CTA TGT CCA TCT GGA AAG CAT CTC TAC ATG TCA  
Glu Ser Ala Ile Tyr Ile Phe Ile Ser Asp Thr Gly Arg Pro Phe Val Glu Met Tyr Ser>

\*      430      440      450      460      470      480

GAA ATC CCC GAA ATT ATA CAC ATG ACT GAA GGA AGG GAG CTC GTC ATT CCC TGC CGG GTT  
CTT TAG GGG CTT TAA TAT GTG TAC TGA CTT CCT TCC CTC GAG CAG TAA GGG ACG GCC CAA  
Glu Ile Pro Glu Ile Ile His Met Thr Glu Gly Arg Glu Leu Val Ile Pro Cys Arg Val>

\*      490      500      510      520      530      540

ACG TCA CCT AAC ATC ACT GTT ACT TTA AAA AAG TTT CCA CTT GAC ACT TTG ATC CCT GAT  
TGC AGT GGA TTG TAG TGA CAA TGA AAT TTT TTC AAA GGT GAA CTG TGA AAC TAG GGA CTA  
Thr Ser Pro Asn Ile Thr Val Thr Leu Lys Phe Pro Leu Asp Thr Leu Ile Pro Asp>

Figure 10B

550            560            570            580            590            600

\*        \*        \*        \*        \*        \*

GGA AAA CGC ATA ATC TGG GAC AGT AGA AAG GGC TTC ATC ATA TCA AAT GCA ACG TAC AAA  
CCT TTT GCG TAT TAG ACC CTG TCA TCT TTC CCG AAG TAG TAT AGT TTA CGT TGC ATG TTT  
Gly Lys Arg Ile Ile Trp Asp Ser Arg Lys Gly Ile Ile Ser Asn Ala Thr Tyr Lys>

610            620            630            640            650            660

\*        \*        \*        \*        \*        \*

GAA ATA GGG CTT CTG ACC TGT GAA GCA ACA GTC AAT GGG CAT TTG TAT AAG ACA AAC TAT  
CTT TAT CCC GAA GAC TGG ACA CTT CGT TGT CAG TTA CCC GTA AAC ATA TTC TGT TTG ATA  
Glu Ile Gly Leu Leu Thr Cys Glu Ala Thr Val Asn Gly His Leu Tyr Thr Asn Tyr>

670            680            690            700            710            720

\*        \*        \*        \*        \*        \*

CTC ACA CAT CGA CAA ACC AAT ACA ATA GAT GTC CAA ATA AGC ACA CCA CGC CCA GTC  
GAG TGT GTA GCT GTT TGA TGT TAG TAT CTA CAG GTT TAT TCG TGT GGT GCG GGT CAG  
Leu Thr His Arg Gln Thr Asn Thr Ile Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val>

730            740            750            760            770            780

\*        \*        \*        \*        \*        \*

AAA TTA CTT AGA GGC CAT ACT CTT GTC CTC AAT TGT ACT GCT ACC ACT CCC TTG AAC ACG  
TTT AAT GAA TCT CCG GTA TGA GAA CAG GAG TTA ACA TGA CGA TGG TGA GGG AAC TTG TGC  
Lys Leu Leu Arg Gly His Thr Leu Val Leu Asn Cys Thr Ala Thr Thr Pro Leu Asn Thr>

790            800            810            820            830            840

\*        \*        \*        \*        \*        \*

AGA GTT CAA ATG ACC TGG AGT TAC CCT GAT GAA AAA AAT AAG AGA GCT TCC GTA AGG CGA  
TCT CAA GTT TAC TGG ACC TCA ATG GGA CTA CTT TTT TTA TTC TCT CGA AGG CAT TCC GCT  
Arg Val Gln Met Thr Trp Ser Tyr Pro Asp Glu Lys Asn Lys Arg Ala Ser Val Arg Arg>

850            860            870            880            890            900

\*        \*        \*        \*        \*        \*

CGA ATT GAC CAA AGC AAT TCC CAT GCC AAC ATA TTC TAC AGT GTT CTT ACT ATT GAC AAA  
GCT TAA CTG GTT TCG TTA AGG GTA CGG TTG TAT AAG ATG TCA CAA GAA TGA TAA CTG TTT  
Arg Ile Asp Gln Ser Asn Ser His Ala Asn Ile Phe Tyr Ser Val Leu Thr Ile Asp Lys>

910            920            930            940            950            960

\*        \*        \*        \*        \*        \*

ATG CAG AAC AAA GAC AAA GGA CTT TAT ACT TGT CGT GTA AGG AGT GGA CCA TCA TTC AAA  
TAC GTC TTG TTT CTG TTT CCT GAA ATA TGA ACA GCA CAT TCC TCA CCT GGT AGT AAG TTT  
Met Gln Asn Lys Asp Lys Gly Leu Tyr Thr Cys Arg Val Arg Ser Gly Pro Ser Phe Lys>

970            980            990            1000          1010          1020

\*        \*        \*        \*        \*        \*

TCT GTT AAC ACC TCA GTG CAT ATA TAT GAT AAA GCA GGC CCG GGC GAG CCC AAA TCT TGT  
AGA CAA TTG TGG AGT CAC GTA TAT ATA CTA TTT CGT CCG GGC CCG CTC GGG TTT AGA ACA  
Ser Val Asn Thr Ser Val His Ile Tyr Asp Lys Ala Gly Pro Gly Glu Pro Lys Ser Cys>

1030          1040          1050          1060          1070          1080

\*        \*        \*        \*        \*        \*

GAC AAA ACT CAC ACA TGC CCA CCG TGC CCA GCA CCT GAA CTC CTG GGG GGA CCG TCA GTC  
CTG TTT TGA GTG TGT AGC GGT GGC ACG GGT CGT GGA CTT GAG GAC CCC CCT GGC AGT CAG  
Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val>

Figure 10C

1090            1100            1110            1120            1130            1140

\* \* \* \* \*

TTC CTC TTC CCC CCA AAA CCC AAG GAC ACC CTC ATG ATC TCC CGG ACC CCT GAG GTC ACA  
AAG GAG AAG GGG GGT TTT GGG TTC CTG TGG GAG TAC TAG AGG GCC TGG GGA CTC CAG TGT  
Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr>

1150            1160            1170            1180            1190            1200

\* \* \* \* \*

TGC GTG GTG GTG GAC GTG AGC CAC GAA GAC CCT GAG GTC AAG TTC AAC TGG TAC GTG GAC  
ACG CAC CAC CAC CTG CAC TCG GTG CTT CTG GGA CTC CAG TTC AAG TTG ACC ATG CAC CTG  
Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp>

1210            1220            1230            1240            1250            1260

\* \* \* \* \*

GCC GTG GAG GTG CAT AAT GCC AAG ACA AAG CCG CGG GAG GAG CAG TAC AAC AGC ACG TAC  
CCG CAC CTC CAC GTA TTA CGG TTC TGT TTG GGC GCC CTC CTC GTC ATG TTG TCG TGC ATG  
Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr>

1270            1280            1290            1300            1310            1320

\* \* \* \* \*

CGT GTG GTC AGC GTC CTC ACC GTC CTG CAC CAG GAC TGG CTG AAT GGC AAG GAG TAC AAG  
CCA CAC CAG TCG CAG GAG TGG CAG GAC GTG GTC CTG ACC GAC TTA CCG TTC CTC ATG TTC  
Arg Val Val Ser Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys>

1330            1340            1350            1360            1370            1380

\* \* \* \* \*

TGC AAG GTC TCC AAC AAA GCC CTC CCA GCC CCC ATC GAG AAA ACC ACC ATC TCC AAA GCC AAA  
ACG TTC CAG AGG TTG TTT CGG GAG GGT CGG GGG TAG CTC TTT TGG TAG AGG TTT CGG TTT  
Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys>

1390            1400            1410            1420            1430            1440

\* \* \* \* \*

GGG CAG CCC CGA GAA CCA CAG GTG TAC ACC CTG CCC CCA TCC CGG GAT GAG CTG ACC AAG  
CCC GTC GGG GCT CTT GGT GTC CAC ATG TGG GAC GGG GGT AGG GCC CTA CTC GAC TGG TTC  
Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys>

1450            1460            1470            1480            1490            1500

\* \* \* \* \*

AAC CAG GTC AGC CTG ACC TGC CTG GTC AAA GGC TTC TAT CCC AGC GAC ATC GCC GTG GAG  
TTG GTC CAG TCG GAC TGG ACG GAC CAG TTT CCG AAG ATA GGG TCG CTG TAG CGG CAC CTC  
Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu>

1510            1520            1530            1540            1550            1560

\* \* \* \* \*

TGG GAG AGC AAT GGG CAG CCG GAG AAC AAC TAC AAG ACC ACG CCT CCC GTG CTG GAC TCC  
ACC CTC TCG TTA CCC GTC GGC CTC TTG TTG ATG TTC TGG TGC GGA GGG CAC GAC CTG AGG  
Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Pro Pro Val Leu Asp Ser>

1570            1580            1590            1600            1610            1620

\* \* \* \* \*

GAC GGC TCC TTC TTC CTC TAC AGC AAG CTC ACC GTG GAC AAG AGC AGG TGG CAG CAG GGG  
CTG CCG AGG AAG AAG GAG ATG TCG TTC GAG TGG CAC CTG TTC TCG TCC ACC GTC GTC CCC  
Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly>

Figure 10D

1630            1640            1650            1660            1670            1680  
\*            \*            \*            \*            \*            \*            \*  
AAC GTC TTC TCA TGC TCC GTG ATG CAT GAG GCT CTG CAC AAC CAC TAC ACG CAG AAG AGC  
TTG CAG AAG AGT ACG AGG CAC TAC GTA CTC CGA GAC GTG TTG GTG ATG TGC GTC TTC TCG  
Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gin Lys Ser>  
  
1690            1700  
\*            \*            \*            \*  
CTC TCC CTG TCT CCG GGT AAA TGA  
GAG AGG GAC AGA GGC CCA TTT ACT  
Leu Ser Leu Ser Pro Gly Lys \*\*\*>

Figure 11

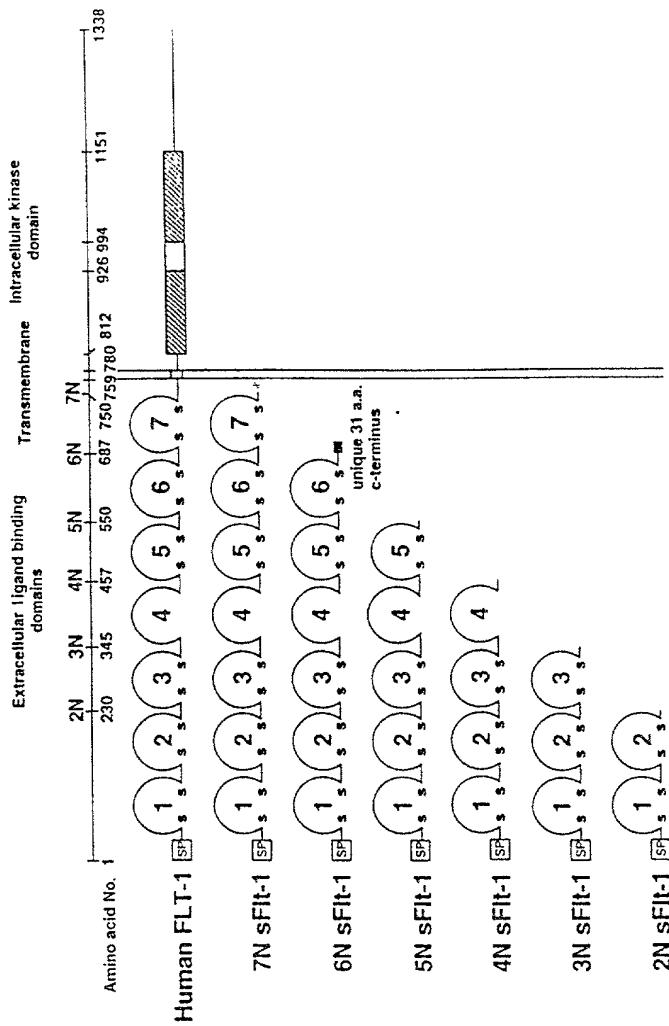


Figure 12A

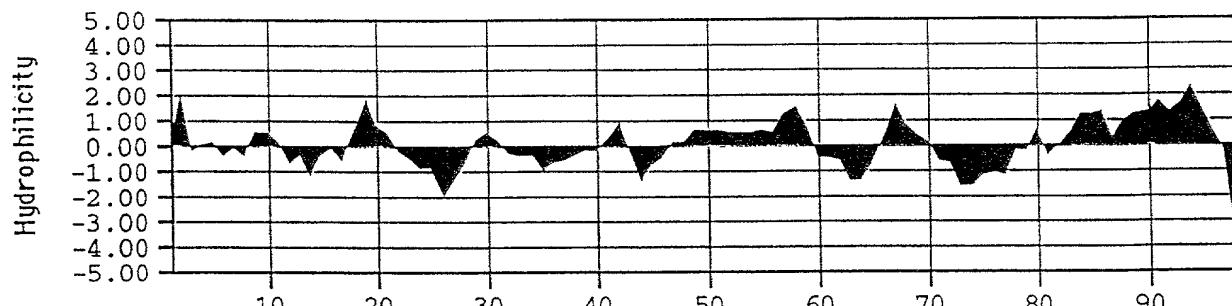


Figure 12B

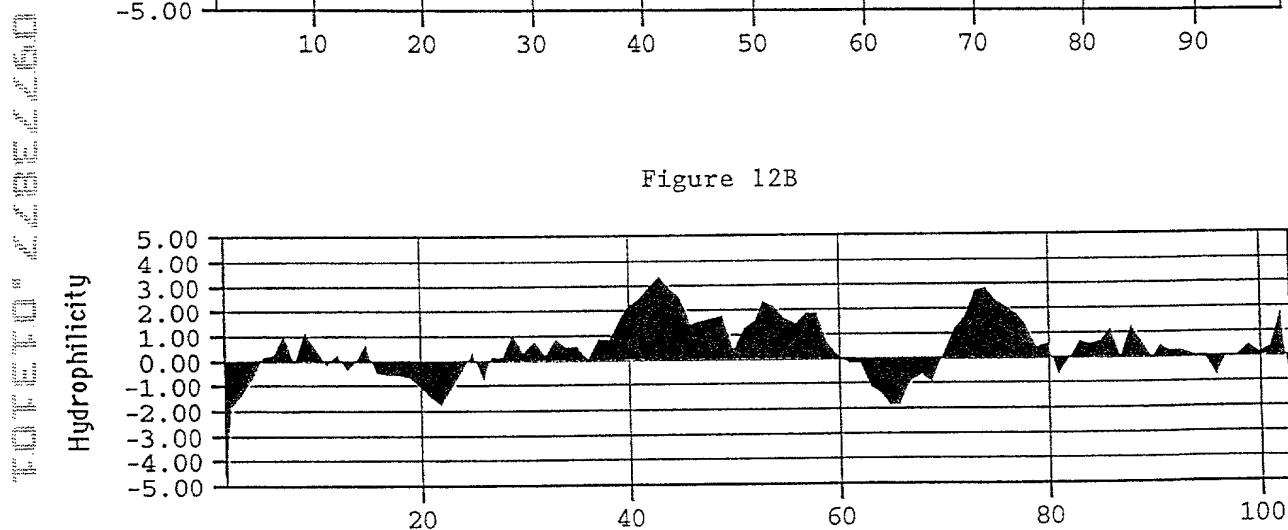


Figure 13A

10            20            30            40            50            60

\*        \*        \*        \*        \*        \*        \*

ATG GTC AGC TAC TGG GAC ACC GGG GTC CTG CTG TGC GCG CTG CTC AGC TGT CTG CTT CTC  
TAC CAG TCG ATG ACC CTG TGG CCC CAG GAC GAC ACG CGC GAG TCG ACA GAC GAA GAG  
Met Val Ser Tyr Trp Asp Thr Gly Val Leu Leu Cys Ala Leu Leu Ser Cys Leu Leu Leu>

70            80            90            100          110          120

\*        \*        \*        \*        \*        \*        \*

ACA GGA TCT AGT TCA GGT TCA AAA TTA AAA GAT CCT GAA CTG AGT TTA AAA GGC ACC CAG  
TGT CCT AGA TCA AGT CCA AGT TTT AAT TTT CTA GGA CTT GAC TCA AAT TTT CCG TGG GTC  
Thr Gly Ser Ser Ser Gly Ser Lys Leu Lys Asp Pro Glu Leu Ser Leu Lys Gly Thr Gln>

130          140          150          160          170          180

\*        \*        \*        \*        \*        \*        \*

CAC ATC ATG CAA GCA GGC CAG ACA CTG CAT CTC CAA TGC AGG GGG GAA GCA GCC CAT AAA  
GTG TAG TAC GTT CGT CCG GTC TGT GAC GTA GAG GTT ACG TCC CCC CTT CGT CGG GTA TTT  
His Ile Met Gln Ala Gly Gln Thr Leu His Leu Gln Cys Arg Gly Glu Ala Ala His Lys>

190          200          210          220          230          240

\*        \*        \*        \*        \*        \*        \*

TGG TCT TTG CCT GAA ATG GTG AGT AAG GAA AGC GAA AGG CTG AGC ATA ACT AAA TCT GCC  
ACC AGA AAC GGA CTT TAC CAC TCA TTC CTT TCG CTT TCC GAC TCG TAT TGA TTT AGA CGG  
Trp Ser Leu Pro Glu Met Val Ser Lys Glu Ser Glu Arg Leu Ser Ile Thr Lys Ser Ala>

250          260          270          280          290          300

\*        \*        \*        \*        \*        \*        \*

TGT GGA AGA AAT GGC AAA CAA TTC TGC AGT ACT TTA ACC TTG AAC ACA GCT CAA GCA AAC  
ACA CCT TCT TTA CCG TTT GTT AAG ACG TCA TGA AAT TGG AAC TTG TGT CGA GTT CGT TTG  
Cys Gly Arg Asn Gln Phe Cys Ser Thr Leu Thr Leu Asn Thr Ala Gln Ala Asn>

310          320          330          340          350          360

\*        \*        \*        \*        \*        \*        \*

CAC ACT GGC TTC TAC AGC TGC AAA TAT CTA GCT GTA CCT ACT TCA AAG AAG AAG GAA ACA  
GTG TGA CCG AAG ATG TCG ACG TTT ATA GAT CGA CAT GGA TGA AGT TTC TTC CTT TGT  
His Thr Gly Phe Tyr Ser Cys Lys Tyr Leu Ala Val Pro Thr Ser Lys Lys Glu Thr>

370          380          390          400          410          420

\*        \*        \*        \*        \*        \*        \*

GAA TCT GCA ATC TAT ATA TTT ATT AGT GAT ACA GGT AGA CCT TTC GTA GAG ATG TAC AGT  
CTT AGA CGT TAG ATA TAT AAA TAA TCA CTA TGT CCA TCT GGA AAG CAT CTC TAC ATG TCA  
Glu Ser Ala Ile Tyr Ile Phe Ile Ser Asp Thr Gly Arg Pro Phe Val Glu Met Tyr Ser>

430          440          450          460          470          480

\*        \*        \*        \*        \*        \*        \*

GAA ATC CCC GAA ATT ATA CAC ATG ACT GAA GGA AGG GAG GTC ATT CCC TGC CGG GTT  
CTT TAG GGG CTT TAA TAT GTG TAC TGA CTT CCT CTC GAG CAG TAA GGG ACG GCC CAA  
Glu Ile Pro Glu Ile Ile His Met Thr Glu Gly Arg Glu Leu Val Ile Pro Cys Arg Val>

490          500          510          520          530          540

\*        \*        \*        \*        \*        \*        \*

ACG TCA CCT AAC ATC ACT GTT ACT TTA AAA AAG TTT CCA CTT GAC ACT TTG ATC CCT GAT  
TGC AGT GGA TTG TAG TGA CAA TGA AAT TTT TTC AAA GGT GAA CTG TGA AAC TAG GGA CTA  
Thr Ser Pro Asn Ile Thr Val Thr Leu Lys Phe Pro Leu Asp Thr Leu Ile Pro Asp>

Figure 13B

550            560            570            580            590            600

\*        \*        \*        \*        \*        \*        \*        \*

GGA AAA CGC ATA ATC TGG GAC AGT AGA AAG GGC TTC ATC ATA TCA AAT GCA ACG TAC AAA  
CCT TTT GCG TAT TAG ACC CTG TCA TCT TTC CCG AAG TAG TAT AGT TTA CGT TGC ATG TTT  
Gly Lys Arg Ile Ile Trp Asp Ser Arg Lys Gly Phe Ile Ile Ser Asn Ala Thr Tyr Lys>

610            620            630            640            650            660

\*        \*        \*        \*        \*        \*        \*        \*

GAA ATA GGG CTT CTG ACC TGT GAA GCA ACA GTC AAT GGG CAT TTG TAT AAG ACA AAC TAT  
CTT TAT CCC GAA GAC TGG ACA CTT CGT TGT CAG TTA CCC GTA AAC ATA TTC TGT TTG ATA  
Glu Ile Gly Leu Leu Thr Cys Glu Ala Thr Val Asn Gly His Leu Tyr Lys Thr Asn Tyr>

670            680            690            700            710            720

\*        \*        \*        \*        \*        \*        \*        \*

CTC ACA CAT CGA CAA ACC AAT ACA ATC ATA GAT GTC CAA ATA AGC ACA CCA CGC CCA GTC  
GAG TGT GTA GCT GTT TGG TTA TGT TAG TAT CTA CAG GTT TAT TCG TGT GGT GCG GGT CAG  
Leu Thr His Arg Gln Thr Asn Thr Ile Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val>

730            740            750            760            770            780

\*        \*        \*        \*        \*        \*        \*        \*

AAA TTA CTT AGA GGC CAT ACT CTT GTC CTC AAT TGT ACT GCT ACC ACT CCC TTG AAC ACG  
TTT AAT GAA TCT CCG GTA TGA GAA CAG GAG TTA ACA TGA CGA TGG TGA GGG AAC TTG TGC  
Lys Leu Leu Arg Gly His Thr Leu Val Leu Asn Cys Thr Ala Thr Thr Pro Leu Asn Thr>

790            800            810            820            830            840

\*        \*        \*        \*        \*        \*        \*        \*

AGA GTT CAA ATG ACC TGG AGT TAC CCT GAT GAA ATT GAC CAA AGC AAT TCC CAT GCC AAC  
TCT CAA GTT TAC TGG ACC TCA ATG GGA CTA CTT TAA CTG GTT TCG TTA AGG GTA CGG TTG  
Arg Val Gln Met Thr Trp Ser Tyr Pro Asp Glu Ile Asp Gln Ser Asn Ser His Ala Asn>

850            860            870            880            890            900

\*        \*        \*        \*        \*        \*        \*        \*

ATA TTC TAC AGT GTT CTT ACT ATT GAC AAA ATG CAG AAC AAA GAC AAA GGA CTT TAT ACT  
TAT AAG ATG TCA CAA GAA TGA TAA CTG TTT TAC GTC TTG TTT CTG TTT CCT GAA ATA TGA  
Ile Phe Tyr Ser Val Leu Thr Ile Asp Lys Met Gln Asn Lys Asp Lys Gly Leu Tyr Thr>

910            920            930            940            950            960

\*        \*        \*        \*        \*        \*        \*        \*

TGT CGT GTA AGG AGT GGA CCA TCA TTC AAA TCT GTT AAC ACC TCA GTG CAT ATA TAT GAT  
ACA GCA CAT TCC TCA CCT GGT AGT AAG TTT AGA CAA TTG TGG AGT CAC GTA TAT ATA CTA  
Cys Arg Val Arg Ser Gly Pro Ser Phe Lys Ser Val Asn Thr Ser Val His Ile Tyr Asp>

970            980            990            1000          1010          1020

\*        \*        \*        \*        \*        \*        \*        \*

AAA GCA GGC CCG GGC GAG CCC AAA TCT TGT GAC AAA ACT CAC ACA TGC CCA CCG TGC CCA  
TTT CGT CCG GGC CCG CTC GGG TTT AGA ACA CTG TTT TGA GTG TGT ACG GGT GGC ACG GGT  
Lys Ala Gly Pro Gly Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro>

1030          1040          1050          1060          1070          1080

\*        \*        \*        \*        \*        \*        \*        \*

GCA CCT GAA CTC CTG GGG GGA CCG TCA GTC TTC CTC TTC CCC CCA AAA CCC AAG GAC ACC  
CGT GGA CTT GAG GAC CCC CCT GGC AGT CAG AAG GAG AAG GGG GGT TTT GGG TTC CTG TGG  
Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr>

Figure 13C

1090            1100            1110            1120            1130            1140

\* \* \* \* \*

CTC ATG ATC TCC CGG ACC CCT GAG GTC ACA TGC GTG GTG GAC GTG AGC CAC GAA GAC  
GAG TAC TAG AGG GCC TGG GGA CTC CAG TGT ACG CAC CAC CTG CAC TCG GTG CTT CTG  
Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp>

1150            1160            1170            1180            1190            1200

\* \* \* \* \*

CCT GAG GTC AAG TTC AAC TGG TAC GTG GAC GGC GTG GAG GTG CAT AAT GCC AAG ACA AAG  
GGA CTC CAG TTC AAG TTG ACC ATG CAC CTG CCG CAC CTC CAC GTA TTA CGG TTC TGT TTC  
Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys>

1210            1220            1230            1240            1250            1260

\* \* \* \* \*

CCG CGG GAG CAG TAC AAC AGC ACG TAC CGT GTG GTC AGC GTC CTC ACC GTC CTG CAC  
GGC GCC CTC CTC GTC ATG TTG TCG ATG GCA CAC CAG TCG CAG GAG TGG CAG GAC GTG  
Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His>

1270            1280            1290            1300            1310            1320

\* \* \* \* \*

CAG GAC TGG CTG AAT GGC AAG GAG TAC AAG TGC AAG GTC TCC AAC AAA GCC CTC CCA GCC  
GTC CTG ACC GAC TTA CCG TTC CTC ATG TTC ACG TTC CAG AGG TTG TTT CGG GAG GGT CGG  
Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala>

1330            1340            1350            1360            1370            1380

\* \* \* \* \*

CCC ATC GAG AAA ACC ATC TCC AAA GCC AAA GGG CAG CCC CGA GAA CCA CAG GTG TAC ACC  
GGG TAG CTC TTT TGG TAG AGG TTT CGG TTT CCC GTC GGG GCT CTT GGT GTC CAC ATG TGG  
Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gln Pro Arg Glu Pro Gln Val Tyr Thr>

1390            1400            1410            1420            1430            1440

\* \* \* \* \*

CTG CCC CCA TCC CGG GAT GAG CTG ACC AAG AAC CAG GTC AGC CTG ACC TGC CTG GTC AAA  
GAC GGG GGT AGG GCC CTA CTC GAC TGG TTC TTG GTC CAG TCG GAC TGG ACC GAC CAG TTT  
Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys>

1450            1460            1470            1480            1490            1500

\* \* \* \* \*

GGC TTC TAT CCC AGC GAC ATC GCC GTG GAG TGG GAG AGC AAT GGG CAG CCG GAG AAC AAC  
CCG AAG ATA GGG TCG CTG TAG CGG CAC CTC ACC CTC TCG TTA CCC GTC GGC CTC TTG TTG  
Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn>

1510            1520            1530            1540            1550            1560

\* \* \* \* \*

TAC AAG ACC ACG CCT CCC GTG CTG GAC TCC GAC GGC TCC TTC TTC CTC CTC TAC AGC AAG CTC  
ATG TTC TGG TGC GGA GGG CAC GAC CTG AGG CTG CCG AGG AAG AAG GAG ATG TCG TTC GAG  
Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu>

1570            1580            1590            1600            1610            1620

\* \* \* \* \*

ACC GTG GAC AAG AGC AGG TGG CAG CAG GGG AAC GTC TTC TCA TGC TCC GTG ATG CAT GAG  
TGG CAC CTG TTC TCG TCC ACC GTC GTC CCC TTG CAG AAG AGT ACG AGG CAC TAC GTA CTC  
Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu>

Figure 13D

1630            1640            1650            1660            1670  
\*            \*            \*            \*            \*            \*            \*  
GCT CTG CAC AAC CAC TAC ACG CAG AAG AGC CTC TCC CTG TCT CCG GGT AAA TGA  
CGA GAC GTG TTG GTG ATG TGC GTC TTC TCG GAG AGG GAC AGA GGC CCA TTT ACT  
Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys \*\*\*>

Figure 14A

10            20            30            40            50            60

\* \* \* \* \*

ATG GTC AGC TAC TGG GAC ACC GGG GTC CTG CTG TGC GCG CTG CTC AGC TGT CTG CTT CTC  
TAC CAG TCG ATG ACC CTG TGG CCC CAG GAC GAC CGC GAC GAG TCG ACA GAC GAA GAG  
Met Val Ser Tyr Trp Asp Thr Gly Val Leu Leu Cys Ala Leu Leu Ser Cys Leu Leu Leu>

70            80            90            100          110          120

\* \* \* \* \*

ACA GGA TCT AGT TCC GGA GGT AGA CCT TTC GTA GAG ATG TAC AGT GAA ATC CCC GAA ATT  
TGT CCT AGA TCA AGG CCT CCA TCT GGA AAG CAT CTC TAC ATG TCA CTT TAG GGG CTT TAA  
Thr Gly Ser Ser Gly Gly Arg Pro Phe Val Glu Met Tyr Ser Glu Ile Pro Glu Ile>

130          140          150          160          170          180

\* \* \* \* \*

ATA CAC ATG ACT GAA GGA AGG GAG CTC GTC ATT CCC TGC CGG GTT ACG TCA CCT AAC ATC  
TAT GTG TAC TGA CTT CCT TCC CTC GAG CAG TAA GGG ACG GCC CAA TGC AGT GGA TTG TAG  
Ile His Met Thr Glu Gly Arg Glu Leu Val Ile Pro Cys Arg Val Thr Ser Pro Asn Ile>

190          200          210          220          230          240

\* \* \* \* \*

ACT GTT ACT TTA AAA AAG TTT CCA CTT GAC ACT TTG ATC CCT GAT GGA AAA CGC ATA ATC  
TGA CAA TGA AAT TTT TIC AAA GGT GAA CTG TGA AAC TAG GGA CTA CCT TTT GCG TAT TAG  
Thr Val Thr Leu Lys Lys Phe Pro Leu Asp Thr Leu Ile Pro Asp Gly Lys Arg Ile Ile>

250          260          270          280          290          300

\* \* \* \* \*

TGG GAC AGT AGA AAG GGC TTC ATC ATA TCA AAT GCA ACG TAC AAA GAA ATA GGG CTT CTG  
ACC CTG TCA TCT TTC CCG AAG TAG TAT AGT TTA CGT TGC ATG TTT CTT TAT CCC GAA GAC  
Trp Asp Ser Arg Lys Gly Phe Ile Ile Ser Asn Ala Thr Tyr Lys Glu Ile Gly Leu Leu>

310          320          330          340          350          360

\* \* \* \* \*

ACC TGT GAA GCA ACA GTC AAT GGG CAT TTG TAT AAG ACA AAC TAT CTC ACA CAT CGA CAA  
TGG ACA CTT CGT TGT CAG TTA CCC GTA AAC ATA TTC TGT TTG ATA GAG TGT GTA GCT GTT  
Thr Cys Glu Ala Thr Val Asn Gly His Leu Tyr Lys Thr Asn Tyr Leu Thr His Arg Gln>

370          380          390          400          410          420

\* \* \* \* \*

ACC AAT ACA ATC ATA GAT GTC CAA ATA AGC ACA CCA CGC CCA GTC AAA TTA CTT AGA GGC  
TGG TTA TGT TAG TAT CTA CAG GTT TAT TCG TGT GGT GCG GGT CAG TTT AAT GAA TCT CCG  
Thr Asn Thr Ile Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val Lys Leu Arg Gly>

430          440          450          460          470          480

\* \* \* \* \*

CAT ACT CTT GTC CTC AAT TGT ACT GCT ACC ACT CCC TTG AAC ACG AGA GTT CAA ATG ACC  
GTA TGA GAA CAG GAG TTA ACA TGA CGA TGG TGA GGG AAC TTG TGC TCT CAA GTT TAC TGG  
His Thr Leu Val Leu Asn Cys Thr Ala Thr Pro Leu Asn Thr Arg Val Gln Met Thr>

490          500          510          520          530          540

\* \* \* \* \*

TGG AGT TAC CCT GAT GAA ATT GAC CAA AGC AAT TCC CAT GCC AAC ATA TTC TAC AGT GTT  
ACC TCA ATG GGA CTA CTT TAA CTG GTT TCG TTA AGG GTA CGG TTG TAT AAG ATG TCA CAA  
Trp Ser Tyr Pro Asp Glu Ile Asp Gln Ser Asn Ser His Ala Asn Ile Phe Tyr Ser Val>

Figure 14B

550            560            570            580            590            600

\*        \*        \*        \*        \*        \*        \*

CTT ACT ATT GAC AAA ATG CAG AAC GAC AAA GGA CTT TAT ACT TGT CGT GTA AGG AGT  
GAA TGA TAA CTG TTT TAC GTC TTG CTG TTT CCT GAA ATA TGA ACA GCA CAT TCC TCA  
Leu Thr Ile Asp Lys Met Gin Asn Lys Asp Lys Gly Leu Tyr Thr Cys Arg Val Arg Ser>

610            620            630            640            650            660

\*        \*        \*        \*        \*        \*        \*

GGA CCA TCA TTC AAA TCT GTT AAC ACC TCA GTG CAT ATA TAT GAT AAA GCA GGC CCG GGC  
CCT GGT AGT AAG TTT AGA CAA TTG TGG AGT CAC GTA TAT ATA CTA TTT CGT CCG GGC CCG  
Gly Pro Ser Phe Lys Ser Val Asn Thr Ser Val His Ile Tyr Asp Lys Ala Gly Pro Gly>

670            680            690            700            710            720

\*        \*        \*        \*        \*        \*        \*

GAG CCC AAA TCT TGT GAC AAA ACT CAC ACA TGC CCA CCG TGC CCA GCA CCT GAA CTC CTG  
CTC GGG TTT AGA ACA CTG TTT TGA GTG TGT ACG GGT GGC ACG GGT CGT GGA CTT GAG GAC  
Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu>

730            740            750            760            770            780

\*        \*        \*        \*        \*        \*        \*

GGG GGA CCG TCA GTC TTC CTC TTC CCC CCA AAA CCC AAG GAC ACC CTC ATG ATC TCC CGG  
CCC CCT GGC AGT CAG AAG GAG GGG GGT TTT GGG TTC CTG TGG GAG TAC TAG AGG GCC  
Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg>

790            800            810            820            830            840

\*        \*        \*        \*        \*        \*        \*

ACC CCT GAG GTC ACA TGC GTG GTG GTG GAC GTG AGC CAC GAA GAC CCT GAG GTC AAG TTC  
TGG GGA CTC CAG TGT ACG CAC CAC CTG CAC TCG GTG CTT CTG GGA CTC CAG TTC AAG  
Thr Pro Glu Val Thr Cys Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe>

850            860            870            880            890            900

\*        \*        \*        \*        \*        \*        \*

AAC TGG TAC GTG GAC GGC GTG GAG GTG CAT AAT GCC AAG ACA AAG CCG CGG GAG CAG  
TTG ACC ATG CAC CTG CCG CAC CTC CAC GTC TTA CGG TTC TGT TTC GGC GCC CTC CTC GTC  
Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln>

910            920            930            940            950            960

\*        \*        \*        \*        \*        \*        \*

TAC AAC AGC ACG TAC CGT GTG GTC AGC GTC CTC ACC GTC CTG CAC CAG GAC TGG CTG AAT  
ATG TTG TCG TGC ATG GCA CAC CAG TCG CAG GAG TGG CAG GAC GTG GTC CTG ACC GAC TTA  
Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn>

970            980            990            1000          1010          1020

\*        \*        \*        \*        \*        \*        \*

GGC AAG GAG TAC AAG TGC AAG TCC AAC AAA GCC CTC CCA GCC CCC ATC GAG AAA ACC  
CCG TTC CTC ATG TTC ACG TTC CAG AGG TTG TTT CGG GAG GGT CGG GGG TAG CTC TTT TGG  
Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr>

1030          1040          1050          1060          1070          1080

\*        \*        \*        \*        \*        \*        \*

ATC TCC AAA GCC AAA GGG CAG CCC CGA GAA CCA CAG GTG TAC ACC CTG CCC CCA TCC CCG  
TAG AGG TTT CGG TTT CCC GTC GGG GCT CTT GGT GTC CAC ATG TGG GAC GGG GGT AGG GCC  
Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg>

Figure 14C

1090            1100            1110            1120            1130            1140  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 GAT GAG CTG ACC AAG AAC CAG GTC AGC CTG ACC TGC CTG GTC AAA GGC TTC TAT CCC AGC  
 CTA CTC GAC TGG TTC TTG GTC CAG TCG GAC TGG AGC GAC CAG TTT CCG AAG ATA GGG TCG  
 Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser>  
  
 1150            1160            1170            1180            1190            1200  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 GAC ATC GCC GTG GAG TGG GAG AGC AAT GGG CAG CCG GAG AAC AAC TAC AAG ACC ACG CCT  
 CTG TAG CGG CAC CTC ACC CTC TCG TTA CCC GTC GGC CTC TTG TTG ATG TTC TGG TGC GGA  
 Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro>  
  
 1210            1220            1230            1240            1250            1260  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 CCC GTG CTG GAC TCC GAC GGC TCC TTC CTC TAC AGC AAG CTC ACC GTG GAC AAG AGC  
 GGG CAC GAC CTG AGG CTG CCG AGG AAG AAG GAG ATG TCG TTC GAG TGG CAC CTG TTC TCG  
 Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser>  
  
 1270            1280            1290            1300            1310            1320  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 AGG TGG CAG CAG GGG AAC GTC TTC TCA TGC TCC GTG ATG CAT GAG GCT CTG CAC AAC CAC  
 TCC ACC GTC GTC CCC TTG CAG AAG AGT ACG AGG CAC TAC GTA CTC CGA GAC GTG TTG GTG  
 Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His>  
  
 1330            1340            1350  
 \*            \*            \*            \*            \*            \*            \*            \*  
 TAC ACG CAG AAG AGC CTC TCC CTG TCT CCG GGT AAA TGA  
 ATG TGC GTC TTC TCG GAG AGG GAC AGA GGC CCA TTT ACT  
 Tyr Thr Gln Lys Ser Leu Ser Pro Gly Lys \*\*\*>

Figure 15A

10            20            30            40            50            60  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 ATG GTC AGC TAC TGG GAC ACC GGG GTC CTG CTG TGC GCG CTG CTC AGC TGT CTG CTT CTC  
 TAC CAG TCG ATG ACC CTG TGG CCC CAG GAC GAC CGC GAC GAG TCG ACA GAC GAA GAG  
 Met Val Ser Tyr Trp Asp Thr Gly Val Leu Leu Cys Ala Leu Leu Ser Cys Leu Leu Leu>

70            80            90            100          110          120  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 ACA GGA TCT AGT TCC GGA GGT AGA CCT TTC GTA GAG ATG TAC AGT GAA ATC CCC GAA ATT  
 TGT CCT AGA TCA AGG CCT CCA TCT GGA AAG CAT CTC TAC ATG TCA CTT TAG GGG CTT TAA  
 Thr Gly Ser Ser Gly Gly Arg Pro Phe Val Glu Met Tyr Ser Glu Ile Pro Glu Ile>

130          140          150          160          170          180  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 ATA CAC ATG ACT GAA GGA AGG GAG CTC GTC ATT CCC TGC CGG GTT ACG TCA CCT AAC ATC  
 TAT GTG TAC TGA CTT CCT TCC GAG CAG TAA GGG ACG GCC CAA TGC AGT GGA TTG TAG  
 Ile His Met Thr Glu Gly Arg Glu Leu Val Ile Pro Cys Arg Val Thr Ser Pro Asn Ile>

190          200          210          220          230          240  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 ACT GTT ACT TTA AAA AAG TTT CCA CTT GAC ACT TTG ATC CCT GAT GGA AAA CGC ATA ATC  
 TGA CAA TGA AAT TTT TTC AAA GGT GAA CTG TGA AAC TAG GGA CTA CCT TTT CCG TAT TAG  
 Thr Val Thr Leu Lys Lys Phe Pro Leu Asp Thr Leu Ile Pro Asp Gly Lys Arg Ile Ile>

250          260          270          280          290          300  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 TGG GAC AGT AGA AAG GGC TTC ATC ATA TCA AAT GCA ACG TAC AAA GAA ATA GGG CTT CTG  
 ACC CTG TCA TCT TTC CCG AAG TAG TAT AGT TTA CGT TGC ATG TTT CTT TAT CCC GAA GAC  
 Tryp Asp Ser Arg Lys Gly Phe Ile Ile Ser Asn Ala Thr Tyr Lys Glu Ile Gly Leu Leu>

310          320          330          340          350          360  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 ACC TGT GAA GCA ACA GTC AAT GGG CAT TTG TAT AAG ACA AAC TAT CTC ACA CAT CGA CAA  
 TGG ACA CTT CGT TGT CAG TTA CCC GTA AAC ATA TTC TGT TTG ATA GAG TGT GTA GCT GTT  
 Thr Cys Glu Ala Thr Val Asn Gly His Leu Tyr Lys Thr Asn Tyr Leu Thr His Arg Gln>

370          380          390          400          410          420  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 ACC AAT ACA ATC ATA GAT GTC CAA ATA AGC ACA CCA CGC CCA GTC AAA TTA CTT AGA GGC  
 TGG TTA TGT TAG TAT CTA CAG GTT TAT TCG TGT GGT GCG GGT CAG TTT AAT GAA TCT CCG  
 Thr Asn Thr Ile Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val Lys Leu Arg Gly>

430          440          450          460          470          480  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 CAT ACT CTT GTC CTC AAT TGT ACT GCT ACC ACT CCC TTG AAC ACG AGA GTT CAA ATG ACC  
 GTA TGA GAA CAG GAG TTA ACA TGA CGA TGG TGA GGG AAC TTG TGC TCT CAA GTT TAC TGG  
 His Thr Leu Val Leu Asn Cys Thr Ala Thr Pro Leu Asn Thr Arg Val Gln Met Thr>

490          500          510          520          530          540  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*

TGG AGT TAC CCT GAT GAA AAA AAT AAG AGA GCT TCC GTA AGG CGA CGA ATT GAC CAA AGC  
 ACC TCA ATG GGA CTA CTT TTT TTA TTC TCT CGA AGG CAT TCC GCT GCT TAA CTG GTT TCG  
 Trp Ser Tyr Pro Asp Glu Lys Asn Lys Arg Ala Ser Val Arg Arg Arg Ile Asp Gln Ser>

Figure 15B

550            560            570            580            590            600  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 AAT TCC CAT GCC AAC ATA TTC TAC AGT GTT CTT ACT ATT GAC AAA ATG CAG AAC AAA GAC  
 TTA AGG GTA CGG TTG TAT AAG ATG TCA CAA GAA TGA TAA CTG TTT TAC GTC TTG TTT CTG  
 Asn Ser His Ala Asn Ile Phe Tyr Ser Val Leu Thr Ile Asp Lys Met Gln Asn Lys Asp>

610            620            630            640            650            660  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 AAA GGA CTT TAT ACT TGT CGT GTA AGG AGT GGA CCA TCA TTC AAA TCT GTT AAC ACC TCA  
 TTT CCT GAA ATA TGA ACA GCA CAT TCC TCA CCT GGT AGT AAG TTT AGA CAA TTG TGG AGT  
 Lys Gly Leu Tyr Thr Cys Arg Val Arg Ser Gly Pro Ser Phe Lys Ser Val Asn Thr Ser>

670            680            690            700            710            720  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 GTG CAT ATA TAT GAT AAA GCA GGC CCG GGC CCC AAA TCT TGT GAC AAA ACT CAC ACA  
 CAC GTA TAT ATA CTA TTT CGT CCG GGC CCG CTC GGG TTT AGA ACA CTG TTT TGA GTG TGT  
 Val His Ile Tyr Asp Lys Ala Gly Pro Gly Glu Pro Lys Ser Cys Asp Lys Thr His Thr>

730            740            750            760            770            780  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 TGC CCA CCG TGC CCA GCA CCT GAA CTC CTG GGG GGA CCG TCA GTC TTC CTC TTC CCC CCA  
 ACG GGT GGC ACG GGT CGT GGA CTT GAG GAC CCC CCT GGC AGT CAG AAG GAG AAG GGG GGT  
 Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Pro Ser Val Phe Leu Phe Pro Pro>

790            800            810            820            830            840  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 AAA CCC AAG GAC ACC CTC ATG ATC TCC CGG ACC CCT GAG GTC ACA TGC GTG GTG GTG GAC  
 TTT GGG TTC CTG TGG GAG TAG AGG GCC TGG GGA CTC CAG TGT ACG CAC CAC CAC CTG  
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp>

850            860            870            880            890            900  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 GTG AGC CAC GAA GAC CCT GAG GTC AAG TTC AAC TGG TAC GTG GAC GGC GTG GAG GTG CAT  
 CAC TCG GTG CTT CTG GGA CTC CAG TTC AAG TTG ACC ATG CAC CTG CCG CAC CTC CAC GTC  
 Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His>

910            920            930            940            950            960  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 AAT GCC AAG ACA AAG CCG CGG GAG GAG CAG TAC AAC AGC ACG TAC CGT GTG GTC AGC GTC  
 TTA CGG TTC TGT TTC GGC GCC CTC CTC GTC ATG TTG TCG TGC ATG GCA CAC CAG TCG CAG  
 Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val>

970            980            990            1000          1010          1020  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 CTC ACC GTC CTG CAC CAG GAC TGG CTG AAT GGC AAG GAG TAC AAG TGC AAG GTC TCC AAC  
 GAG TGG CAG GAC GTG GTC CTG ACC GAC TTA CCG TTC CTC ATG TTC ACG TTC CAG AGG TTG  
 Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn>

1030          1040          1050          1060          1070          1080  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 AAA GCC CTC CCA GCC CCC ATC GAG AAA ACC ATC TCC AAA GCC AAA GGG CAG CCC CGA GAA  
 TTT CGG GAG GGT CGG GGG TAG CTC TTT TGG TAG AGG TTT CGG TTT CCC GTC GGG GCT CTT  
 Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gln Pro Arg Glu>

Figure 15C

1090            1100            1110            1120            1130            1140

\*        \*        \*        \*        \*        \*        \*        \*        \*        \*

CCA CAG GTG TAC ACC CTG CCC CCA TCC CGG GAT GAG CTG ACC AAG AAC CAG GTC AGC CTG  
 GGT GTC CAC ATG TGG GAC GGG GGT AGG GCC CTA CTC GAC TGG TTC TTG GTC CAG TCG GAC  
 Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu>

1150            1160            1170            1180            1190            1200

\*        \*        \*        \*        \*        \*        \*        \*        \*        \*

ACC TGC CTG GTC AAA GGC TTC TAT CCC AGC GAC ATC GCC GTG GAG TGG GAG AGC AAT GGG  
 TGG ACG GAC CAG TTT CCG AAG ATA GGG TCG CTG TAG CGG CAC CTC ACC CTC TCG TTA CCC  
 Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly>

1210            1220            1230            1240            1250            1260

\*        \*        \*        \*        \*        \*        \*        \*        \*        \*

CAG CCG GAG AAC AAC TAC AAG ACC ACG CCT CCC GTG CTG GAC TCC GAC GGC TCC TTC TTC  
 GTC GGC CTC TTG TTG ATG TTC TGG TGC GGA GGG CAC GAC CTG AGG CTG CCG AGG AAG AAG  
 Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe>

1270            1280            1290            1300            1310            1320

\*        \*        \*        \*        \*        \*        \*        \*        \*        \*

CTC TAC AGC AAG CTC ACC GTG GAC AAG AGC AGG TGG CAG CAG GGG AAC GTC TTC TCA TGC  
 GAG ATG TCG TTC GAG TGG CAC CTG TTC TCG TCC ACC GTC GTC CCC TTG CAG AAG AGT ACG  
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys>

1330            1340            1350            1360            1370            1380

\*        \*        \*        \*        \*        \*        \*        \*        \*        \*

TCC GTG ATG CAT GAG GCT CTG CAC AAC CAC TAC ACG CAG AAG AGC CTC TCC CTG TCT CCG  
 AGG CAC TAC GTA CTC CGA GAC GTG TTG GTG ATG TGC GTC TTC TCG GAG AGG GAC AGA GGC  
 Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro>

\*

GGT AAA TGA  
 CCA TTT ACT  
 Gly Lys \*\*\*>

Figure 16A

10            20            30            40            50            60

\* \* \* \* \*

ATG GTC AGC TAC TGG GAC ACC GGG GTC CTG CTG TGC GCG CTG CTC AGC TGT CTG CTT CTC  
TAC CAG TCG ATG ACC CTG TGG CCC CAG GAC GAC ACG CGC GAC GAG TCG ACA GAC GAA GAG  
Met Val Ser Tyr Trp Asp Thr Gly Val Leu Leu Cys Ala Leu Leu Ser Cys Leu Leu Leu>

70            80            90            100          110          120

\* \* \* \* \*

ACA GGA TCT AGT TCA GGT TCA AAA TTA AAA GAT CCT GAA CTG AGT TTA AAA GGC ACC CAG  
TGT CCT AGA TCA AGT CCA AGT TTT AAT TTT CTA GGA CTT GAC TCA AAT TTT CCG TGG GTC  
Thr Gly Ser Ser Gly Ser Lys Leu Lys Asp Pro Glu Leu Ser Leu Lys Gly Thr Gln>

130          140          150          160          170          180

\* \* \* \* \*

CAC ATC ATG CAA GCA GGC CAG ACA CTG CAT CTC CAA TGC AGG GGG GAA GCA GCC CAT AAA  
GTG TAG TAC GTT CGT CCG GTC TGT GAC GTA GAG GTT ACG TCC CCC CTT CGT CGG GTA TTT  
His Ile Met Gln Ala Gly Gln Thr Leu His Leu Gln Cys Arg Gly Glu Ala Ala His Lys>

190          200          210          220          230          240

\* \* \* \* \*

TGG TCT TTG CCT GAA ATG GTG AGT AAG GAA AGC GAA AGG CTG AGC ATA ACT AAA TCT GCC  
ACC AGA AAC GGA CTT TAC CAC TCA TTC CTT TCG CTT TCC GAC TCG TAT TGA TTT AGA CGG  
Trp Ser Leu Pro Glu Met Val Ser Lys Glu Ser Glu Arg Leu Ser Ile Thr Lys Ser Ala>

250          260          270          280          290          300

\* \* \* \* \*

TGT GGA AGA AAT GGC AAA CAA TTC TGC AGT ACT TTA ACC TTG AAC ACA GCT CAA GCA AAC  
ACA CCT TCT TTA CCG TTT GTT AAG ACG TCA TGA AAT TGG AAC TTG TGT CGA GTT CGT TTG  
Cys Gly Arg Asn Gly Lys Gln Phe Cys Ser Thr Leu Thr Leu Asn Thr Ala Gln Ala Asn>

310          320          330          340          350          360

\* \* \* \* \*

CAC ACT GGC TTC TAC AGC TGC AAA TAT CTA GCT GTA CCT ACT TCA AAG AAG AAG GAA ACA  
GTG TGA CCG AAG ATG TCG ACG TTT ATA GAT CGA CAT GGA TGA AGT TTC TTC CTT TGT  
His Thr Gly Phe Tyr Ser Cys Lys Tyr Leu Ala Val Pro Thr Ser Lys Lys Glu Thr>

370          380          390          400          410          420

\* \* \* \* \*

GAA TCT GCA ATC TAT ATA TTT ATT AGT GAT ACA GGT AGA CCT TTC GTA GAG ATG TAC AGT  
CTT AGA CGT TAG ATA TAT AAA TAA TCA CTA TGT CCA TCT GGA AAG CAT CTC TAC ATG TCA  
Glu Ser Ala Ile Tyr Ile Phe Ile Ser Asp Thr Gly Arg Pro Phe Val Glu Met Tyr Ser>

430          440          450          460          470          480

\* \* \* \* \*

GAA ATC CCC GAA ATT ATA CAC ATG ACT GAA GGA AGG GAG CTC GTC ATT CCC TGC CGG GTT  
CTT TAG GGG CTT TAA TAT GTG TAC TGA CTT CCT TCC CTC GAG CAG TAA GGG ACG GCC CAA  
Glu Ile Pro Glu Ile Ile His Met Thr Glu Gly Arg Glu Leu Val Ile Pro Cys Arg Val>

490          500          510          520          530          540

\* \* \* \* \*

ACG TCA CCT AAC ATC ACT GTT ACT TTA AAA AAG TTT CCA CTT GAC ACT TTG ATC CCT GAT  
TGC AGT GGA TTG TAG TGA CAA TGA AAT TTT TTC AAA GGT GAA CTG TGA AAC TAG GGA CTA  
Thr Ser Pro Asn Ile Thr Val Thr Leu Lys Lys Phe Pro Leu Asp Thr Leu Ile Pro Asp>

Figure 16B

550            560            570            580            590            600  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 GGA AAA CGC ATA ATC TGG GAC AGT AGA AAG GGC TTC ATC ATA TCA AAT GCA ACG TAC AAA  
 CCT TTT GCG TAT TAG ACC CTG TCA TCT TTC CCG AAG TAG TAT AGT TTA CGT TGC ATG TTT  
 Gly Lys Arg Ile Ile Trp Asp Ser Arg Lys Gly Phe Ile Ser Asn Ala Thr Tyr Lys>

610            620            630            640            650            660  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 GAA ATA GGG CTT CTG ACC TGT GAA GCA ACA GTC AAT GGG CAT TTG TAT AAG ACA AAC TAT  
 CTT TAT CCC GAA GAC TGG ACA CTT CGT TGT CAG TTA CCC GTA AAC ATA TTC TGT TTG ATA  
 Glu Ile Gly Leu Leu Thr Cys Glu Ala Thr Val Asn Gly His Leu Tyr Lys Thr Asn Tyr>

670            680            690            700            710            720  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 CTC ACA CAT CGA CAA ACC AAT ACA ATC ATA GAT GTC CAA ATA AGC ACA CCA CGC CCA GTC  
 GAG TGT GTA GCT GTT TGG TTA TGT TAG TAT CTA CAG GTT TAT TCG TGT GGT GCG GGT CAG  
 Leu Thr His Arg Gln Thr Asn Thr Ile Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val>

730            740            750            760            770            780  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 AAA TTA CTT AGA GGC CAT ACT CTT GTC CTC AAT TGT ACT GCT ACC ACT CCC TTG AAC ACG  
 TTT AAT GAA TCT CCG GTA TGA GAA CAG GAG TTA ACA TGA CGA TGG TGA GGG AAC TTG TGC  
 Lys Leu Leu Arg Gly His Thr Leu Val Leu Asn Cys Thr Ala Thr Pro Leu Asn Thr>

790            800            810            820            830            840  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 AGA GTT CAA ATG ACC TGG AGT TAC CCT GAT GAA AAA AAT AAG AAC GCT TCC GTA AGG CGA  
 TCT CAA GTT TAC TGG ACC TCA ATG GGA CTA CTT TTT TTA TTC TTG CGA AGG CAT TCC GCT  
 Arg Val Gln Met Thr Trp Ser Tyr Pro Asp Glu Lys Asn Ala Ser Val Arg Arg>

850            860            870            880            890            900  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 CGA ATT GAC CAA AGC AAT TCC CAT GCC AAC ATA TTC TAC AGT GTT CTT ACT ATT GAC AAA  
 GCT TAA CTG GTT TCG TTA AGG GTA CGG TTG TAT AAG ATG TCA CAA GAA TGA TAA CTG TTT  
 Arg Ile Asp Gln Ser Asn Ser His Ala Asn Ile Phe Tyr Ser Val Leu Thr Ile Asp Lys>

910            920            930            940            950            960  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 ATG CAG AAC AAA GAC AAA GGA CTT TAT ACT TGT CGT GTA AGG AGT GGA CCA TCA TTC AAA  
 TAC GTC TTG TTT CTG TTT CCT GAA ATA TGA ACA GCA CAT TCC TCA CCT GGT AGT AAG TTT  
 Met Gln Asn Lys Asp Lys Gly Leu Tyr Thr Cys Arg Val Arg Ser Gly Pro Ser Phe Lys>

970            980            990            1000          1010          1020  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 TCT GTT AAC ACC TCA GTG CAT ATA TAT GAT AAA GCA GGC CCG GGC GAG CCC AAA TCT TGT  
 AGA CAA TTG TGG AGT CAC GTA TAT ATA CTA TTT CGT CCG GGC CCG CTC GGG TTT AGA ACA  
 Ser Val Asn Thr Ser Val His Ile Tyr Asp Lys Ala Gly Pro Gly Glu Pro Lys Ser Cys>

1030          1040          1050          1060          1070          1080  
 \*        \*        \*        \*        \*        \*        \*        \*        \*        \*  
 GAC AAA ACT CAC ACA TGC CCA CCG TGC CCA GCA CCT GAA CTC CTG GGG GGA CCG TCA GTC  
 CTG TTT TGA GTG TGT ACG GGT GGC ACG GGT CGT GGA CTT GAG GAC CCC CCT GGC AGT CAG  
 Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Gly Gly Pro Ser Val>

Figure 16C

1090            1100            1110            1120            1130            1140  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 TTC CTC TTC CCC CCA AAA CCC AAG GAC ACC CTC ATG ATC TCC CGG ACC CCT GAG GTC ACA  
 AAG GAG AAG GGG GGT TTT GGG TTC CTG TGG GAG TAC TAG AGG GCC TGG GGA CTC CAG TGT  
 Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr>

1150            1160            1170            1180            1190            1200  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 TGC GTG GTG GTG GAC GTG AGC CAC GAA GAC CCT GAG GTC AAG TTC AAC TGG TAC GTG GAC  
 ACG CAC CAC CAC CTG CAC TCG GTG CTT CTG GGA CTC CAG TTC AAG TTG ACC ATG CAC CTG  
 Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp>

1210            1220            1230            1240            1250            1260  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 GGC GTG GAG GTG CAT AAT GCC AAG ACA AAG CCG CGG GAG GAG CAG TAC AAC AGC ACG TAC  
 CCG CAC CTC CAC GTA TTA CGG TTC TGT GGC GCC CTC CTC GTC ATG TTG TCG TGC ATG  
 Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr>

1270            1280            1290            1300            1310            1320  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 CGT GTG GTC AGC GTC CTC ACC GTC CTG CAC GAC TGG CTG AAT GGC AAG GAG TAC AAG  
 GCA CAC CAG TCG CAG GAG TGG CAG GAC GTG GTC CTG ACC GAC TTA CCG TTC CTC ATG TTG  
 Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys>

1330            1340            1350            1360            1370            1380  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 TGC AAG GTC TCC AAC AAA GCC CTC CCA GCC CCC ATC GAG AAA ACC ATC TCC AAA GCC AAA  
 ACG TTC CAG AGG TTG TTT CGG GAG GGT CGG GGG TAG CTC TTT TGG TAG AGG TTT CGG TTT  
 Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Ile Glu Lys Thr Ile Ser Lys Ala Lys>

1390            1400            1410            1420            1430            1440  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 GGG CAG CCC CGA GAA CCA CAG GTG TAC ACC CTG CCC CCA TCC CGG GAT GAG CTG ACC AAG  
 CCC GTC GGG GCT CTT GGT GTC CAC ATG TGG GAC GGG GGT AGG GCC CTA CTC GAC TGG TTC  
 Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys>

1450            1460            1470            1480            1490            1500  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 AAC CAG GTC AGC CTG ACC TGC CTG GTC AAA GGC TTC TAT CCC AGC GAC ATC GCC GTG GAG  
 TTG GTC CAG TCG GAC TGG ACG GAC CAG TTT CCG AAG ATA GGG TCG CTG TAG CGG CAC CTC  
 Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu>

1510            1520            1530            1540            1550            1560  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 TGG GAG AGC AAT GGG CAG CCG GAG AAC AAC TAC AAG ACC ACC CCT CCC GTG CTG GAC TCC  
 ACC CTC TCG TTA CCC GTC GGC CTC TTG TTG ATG TTC TGG TGC GGA GGG CAC GAC CTG AGG  
 Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser>

1570            1580            1590            1600            1610            1620  
 \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*            \*  
 GAC GGC TCC TTC CTC CTC TAC AGC AAG CTC ACC GTG GAC AAG AGC AGG TGG CAG CAG GGG  
 CTG CCG AGG AAG AAG GAG ATG TCG TTC GAG TGG CAC CTG TTC TCG TCC ACC GTC GTC CCC  
 Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly>

Figure 16D

1630            1640            1650            1660            1670            1680  
\*       \*       \*       \*       \*       \*       \*       \*       \*       \*       \*  
AAC GTC TTC TCA TGC TCC GTG ATG CAT GAG GCT CTG CAC AAC CAC TAC ACG CAG AAG AGC  
TTG CAG AAG AGT ACC AGG CAC TAC GTA CTC CGA GAC GTG TTG GTG ATG TGC GTC TTC TCG  
Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser>  
  
1690            1700  
\*       \*       \*       \*  
CTC TCC CTG TCT CCG GGT AAA TGA  
GAG AGG GAC AGA GGC CCA TTT ACT  
Leu Ser Leu Ser Pro Gly Lys \*\*\*>

Figure 17

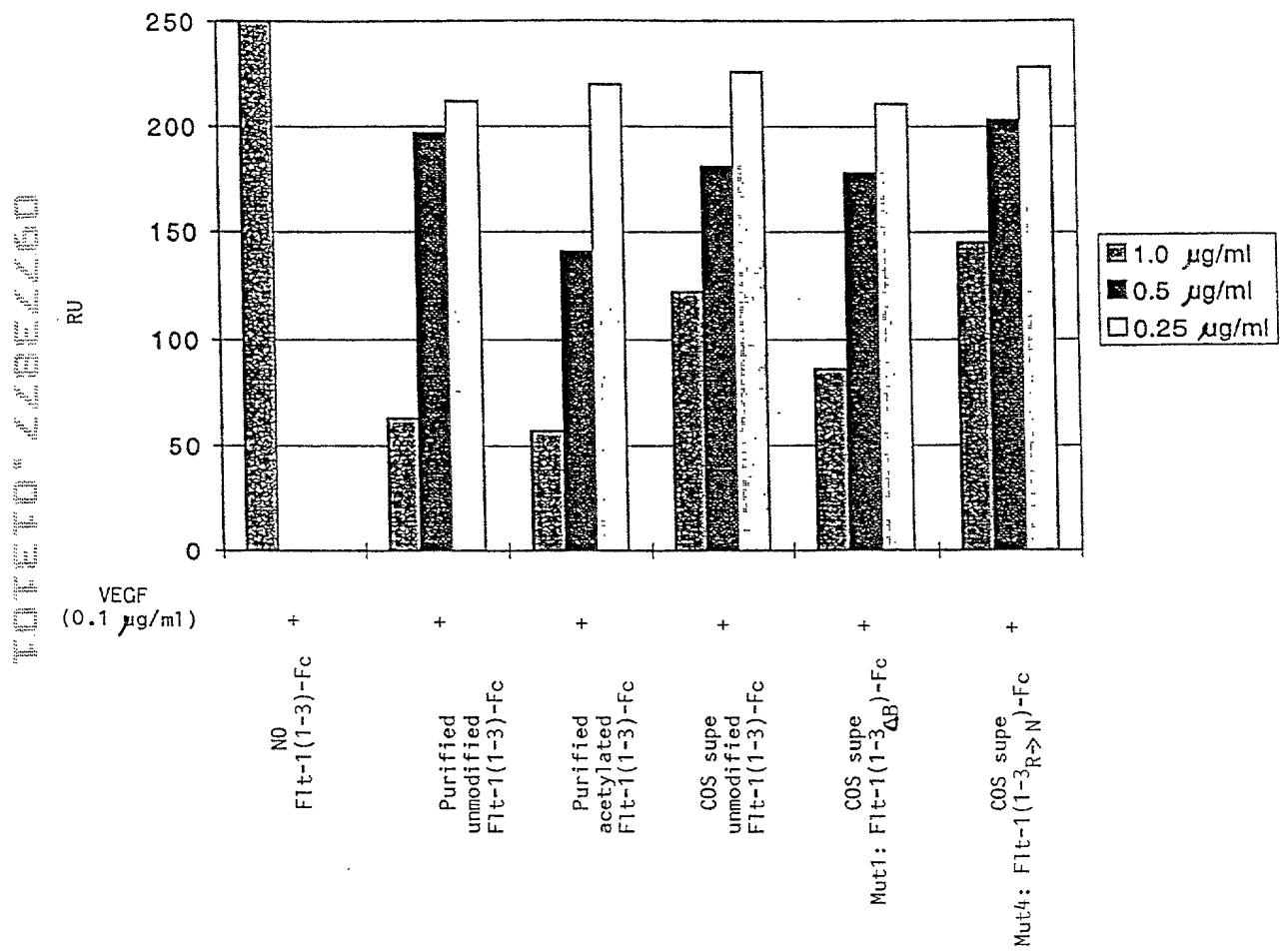


Figure 18

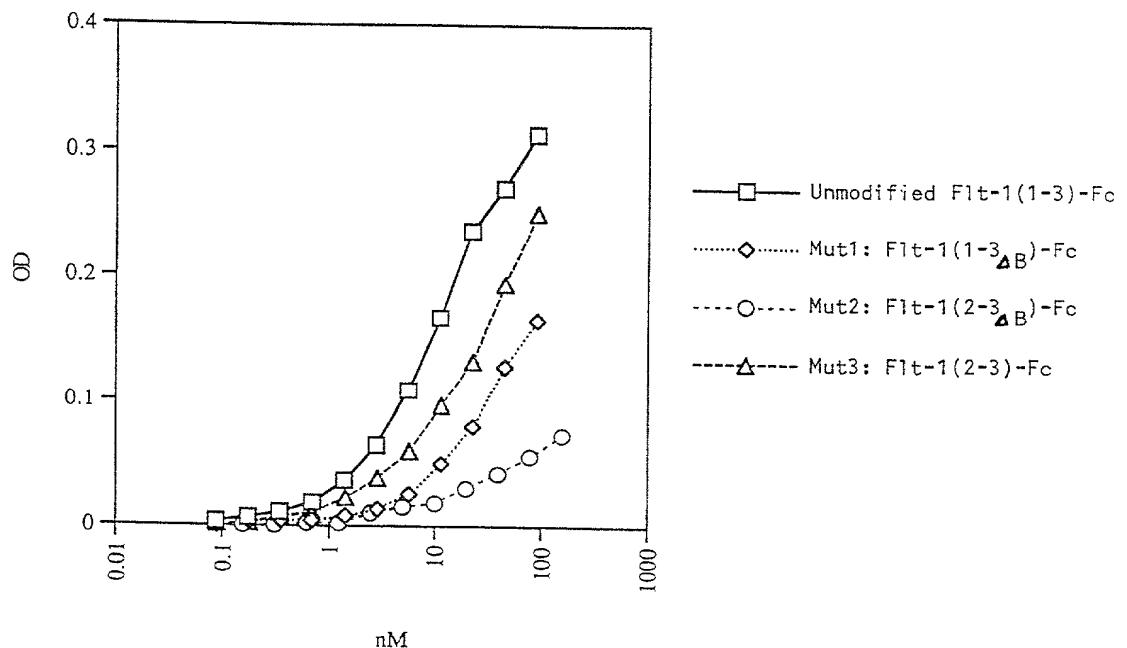


Figure 19

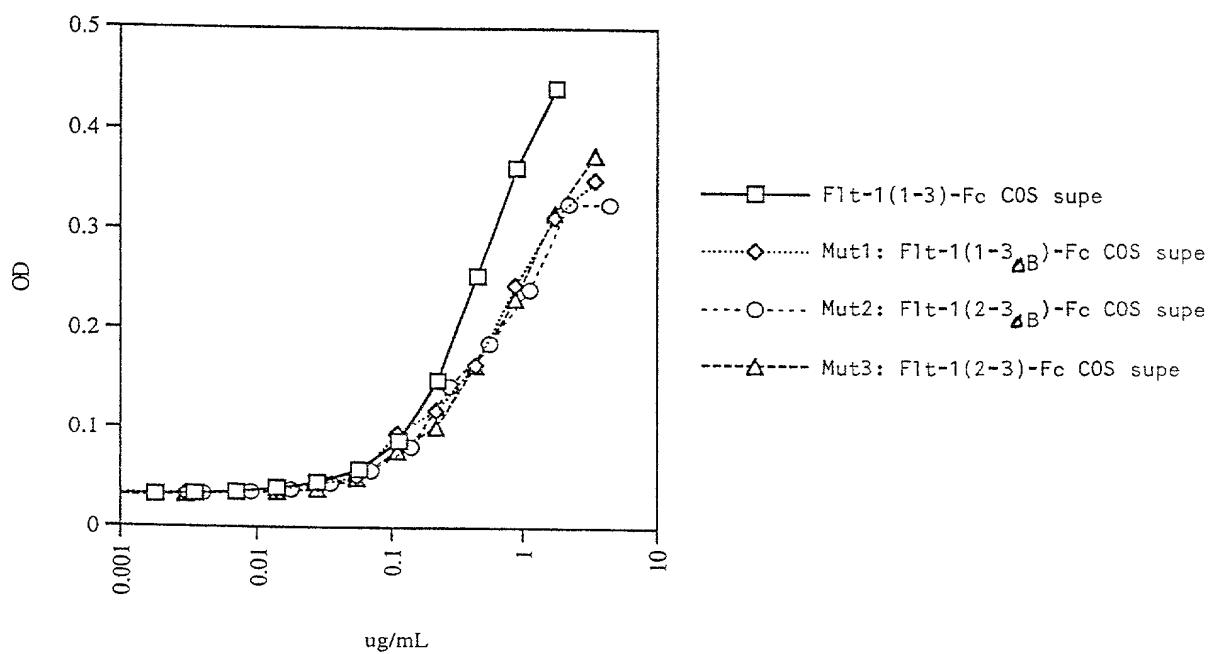


Figure 20

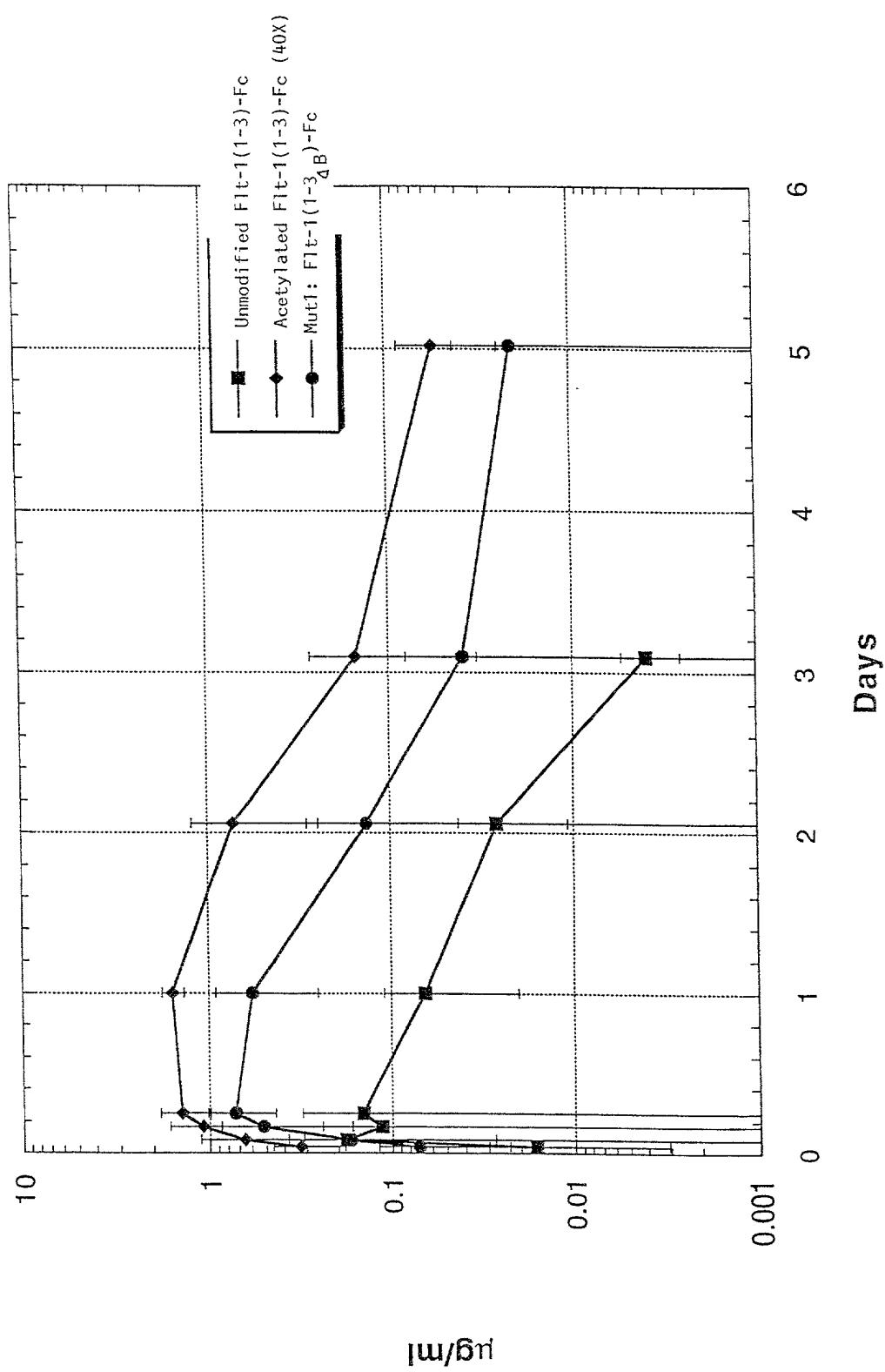


Figure 21A

>EcoRI\_site

10	20	30	40	50	60	70	80
AAGCTTGGGCTGCAGGTGATCGACTCTAGAGGATCGATCCCGGGCGAGCTCGAATTGCAACCACCATGGTCAGCTAC							
TTCGAACCGACGTCCAGCTAGCTGAGATCTCTAGCTAGGGGCCGCTCGAGCTTAAGCGTTGGTAGCGATG							
M V S Y>							
1	4						
>							

>BspEI\_bridge

90	100	110	120	130	140	150	160
TGGGACACCGGGGCTCTCGCTGCGCGCTGCTCAGCTGCTGCTCTCACAGGATCTAGTCCGGAGGTAGACCTTCGT							
ACCCCTGTGGCCCCAGGACGACACGGCGACGAGTCGACAGACGAAGAGTGTCCCTAGATCAAGGCCTCCATCTGAAAGCA							
W D T G V L L C A L L S C L L T G S S>							
<u>FLT1 SS</u> >							
S G>							
>							
G R P F V>							
31							
>							
170	180	190	200	210	220	230	240
AGAGATGTACAGTGAAATCCCCGAAATTATACACATGACTGAAGGAAGGGAGCTCGTCATTCCCTGCCGGTTACGTCAC							
TCTCTACATGTCACTTAGGGCTTAATATGTGACTGACTTCCTCCCTCGAGCAGTAAGGGACGGCCAATGCACTG							
E M Y S E I P E I I H M T E G R E L V I P C R V T S>							
57							
<u>HFLT1 D2</u> >							
250	260	270	280	290	300	310	320
CTAACATCACTGTTACTTTAAAAAGTTCCACTTGACACTTGATCCCTGATGGAAAACGCATAATCTGGGACAGTAGA							
GATTGAGTGACAATGAAATTTCAGGTAAGTGTAACTAGGGACTACCTTTGCGTATTAGACCCGTGTCATCT							
P N I T V T L K K F P L D T L I P D G K R I I W D S R>							
84							
<u>HFLT1 D2</u> >							
330	340	350	360	370	380	390	400
AAGGGCTTCATCATATCAAATGCAACGTCACAAAGAAATAGGGCTCTGACCTGTGAAGCAACAGTCATGGCATTGTA							
TTCCCGAAGTAGTATAGTTACGTTGCATGTTATCCGAAGACTGGACACTTCGTTGTCAGTTACCCGTAAACAT							
K G F I I S N A T Y K E I G L L T C E A T V N G H L Y>							
111							
<u>HFLT1 D2</u> >							
410	420	430	440	450	460	470	480
TAAGACAAACTATCTCACACATGACAAACCAATAACATAGATGIGGTTCTGAGTCGCTCATGGAATGAACTAT							
ATTCTGTTGATAGAGTGTGTAGCTGGTTATGTTAGTATCTACACCAAGACTCAGGCAGAGTACCTTAACCTGATA							
K T N Y L T H R Q T N T I I D>							
<u>HFLT1 D2</u> >							
V V L S P S H G I E L>							
137							
<u>HFLK1 D3</u> >							

Figure 21B

0 9 7 7 2 8 2 7 0 4 6 0

490	500	510	520	530	540	550	560
CTGTTGGAGAAAAGCTTGTCTTAAATTGTACAGCAAGAAGTGAACATAATCTGGGGATTGACTTCACGGAAATACCCCT							
GACAACCTTTCGAACAGAATTAAACATGTCGTTCTGACTTGATTTACACCCCTAACCTGAAGTTGACCCTTATGGGA							
S	V	G	E	K	L	V	Z
N	C	T	A	R	T	E	L
N	V	G	I	D	F	N	W
						E	Y
P>							
164							
<u>HFLK1 D3</u>							
>							

570	580	590	600	610	620	630	640
TCTTCGAAGCATCAGCATAAGAAACTTGTAAACCGAGACCTAAAAACCCAGTCTGGGAGTGAGATGAAGAAATTGAG							
AGAAGCTTCGTAGTCGTATTCTTGAACATTGGCTCTGGATTTGGGTACAGACCCCTCACTCTACTCTTTAAAACTC							
S	S	K	H	Q	H	K	K
L	V	N	R	D	L	K	T
Q	S	G	S	E	M	K	K
F	L	S					
S>							
191							
<u>HFLK1 D3</u>							
>							

650	660	670	680	690	700	710	720
CACCTTAACATAGATGGTGTAAACCCGGAGTGACCAAGGATTGTACACCTGTGCAGCATTCCAGTGGGCTGATGACCAAGA							
GTGGAATTGATATCTACCACATTGGGCTCACTGGTCTAACATGTGGACACGTCGTAGGTACCCGACTACTGGTTCT							
T	L	T	I	D	G	V	T
R	S	D	Q	G	Z	Y	T
C	A	A	S	S	G	L	M
K						T	K>
217							
<u>HFLK1 D3</u>							
>							

>Srf_Bridge_							
730	740	750	760	770	780	790	800
AGAACAGCACATTGTCAAGGGTCCATGAAAAGGGCCCGGGGACAAAACACTCACACATGCCAACCGTGCCCCAGCACCTGAA							
TCTTGTGTAAACAGTCCCAGGTACTTTCCGGGCCCCTGTGTTGAGTGTACGGGTGGCACGGGCGTGGACT							
K	N	S	T	F	V	R	H
V	R	V	H	E	K>		
<u>HFLK1 D3</u>							
>							
G P G>							
>							
D	K	T	H	T	C	P	P
L	L	G	G	P	S	V	F
F	L	F	P	P	K	P	K
D	T	L	M	I	S	R	T
T	P	E	V	T>			
244							
<u>FCAC1 (A)</u>							
>							

810	820	830	840	850	860	870	880
CTCCTGGGGGACCGTCAGTCTTCCCTTCCCCAAAACCCAAGGACACCCCTCATGATCTCCGGACCCCTGAGGTAC							
GAGGACCCCCCTGGCAGTCAGAAGGAGAAGGGGGTTTGGGCTCTGTGGGAGTACTAGAGGGCCTGGGACTCCAGTG							
L	L	G	G	P	S	V	F
F	L	F	P	P	K	P	K
D	T	L	M	I	S	R	T
T	P	E	V	E	V	T	>
271							
<u>FCAC1 (A)</u>							
>							

890	900	910	920	930	940	950	960
ATGCGTGGTGGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGGACGGCGTGGAGGTGCATAATG							
TACGCACCAACCACCTGCACACTCGGTGCTCTGGGACTCCAGTTCAAGTTGACCATGCACCTGCCACCTCCACGTATTAC							
C	V	V	V	D	V	S	H
D	V	S	H	E	D	P	E
V	K	F	N	W	Y	V	D
T	Y	R	V	V	S	V	G
S	T	Y	R	V	L	T	V
N					H	Q	H
					D	W	N>
297							
<u>FCAC1 (A)</u>							
>							

970	980	990	1000	1010	1020	1030	1040
CCAAGACAAAGCCGGGGAGGAGCAGTACAACAGCACGTACCGTGGTCAGCGTCCTCACCGTCTGCACCAAGGACTGG							
GGTTCTGTTCCGGCGCCCTCCCTCGTCATGTTGTCGTGCATGGCACACCGAGTCCAGGAGTGGCAGGACGTGGCTCTGACC							
A	K	T	K	P	R	E	E
P	R	E	E	Q	Y	N	S
E					S	T	T
Q	Y	N	S	T	Y	R	V
Y	N	S	T	Y	V	V	S
N	S	T	Y	R	V	V	L
S	T	Y	R	V	V	L	T
T	Y	R	V	V	L	T	V
Y	R	V	V	L	T	V	H
R	V	V	L	T	V	H	Q
V	V	L	T	V	H	Q	D
L	T	V	H	Q	D	W	>
324							
<u>FCAC1 (A)</u>							
>							

Figure 21C

351 >

```

1050      1060      1070      1080      1090      1100      1110      1120
CTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAAACAAAGCCCTCCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCAA
GACTTACCGTTCCCTCATGTTCACGTCCAGAGGTGTTCGGGAGGGTCGGGGTAGCTTTGGTAGAGGTTCGGTT
L N G K E Y K C K V S N K A L P A P I E K T I S K A K>
_____  

FCΔC1 (A) _____ >
```

377 >

```

>A>C_A_allotype
|
>G>T_A_allotype
|
1130      1140      1150      1160      1170      1180      1190      1200
AGGGCAGCCCCGAGAACACAGGTGTACACCCCTGCCCTCATCCCGGGATGAGCTGACCAAGAACAGGTCAAGCCTGACCT
TCCCCTCGGGCTCTGGTGTCCACATGTGGGACGGGGTAGGGCCCTACTCGACTGGTCTTGGTCCAGTCGGACTGG
G Q P R E P Q V Y T L P P S R D E L T K N Q V S L T>
_____  

FCΔC1 (A) _____ >
```

404 >

```

1210      1220      1230      1240      1250      1260      1270      1280
GCCTGGTCAAAGGCTTCTATCCCAGCGACATGCCGCTGGAGTGGGAGAGCAATGGGCAGCCGGAGAACAACTACAAGACC
CGGACCAGTTCCGAAGATAAGGTGCGCTGTAGCGGCACCTCACCCCTCGTTACCCGTGGCCTCTGGTATGTTCTGG
C L V K G F Y P S D I A V E W E S N G Q P E N N Y K T>
_____  

FCΔC1 (A) _____ >
```

431 >

```

>T>C
|
1290      1300      1310      1320      1330      1340      1350      1360
ACGCCTCCCGTGCTGGACTCCGACGGCTCCTCTCTATAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGG
TGCGGAGGGCACCTGAGGCTGCCGAGGAAGAAGGAGATATCGTTCGAGTGGCACCTGTTCTCGTCCACCGTCGTCCC
T P P V L D S D G S F F L Y S K L T V D K S R W Q Q G>
_____  

FCΔC1 (A) _____ >
```

457 >

```

1370      1380      1390      1400      1410      1420      1430      1440
GAACGTCTCTCATGCTCCGTATGCATGAGGCTCTGCACAACCAACTACACGCAGAAGAGCCTCTCCCTGTCTCCGGTA
CTTGCAGAAGAGTACCGAGGCACTACGGTACTCCGAGACGTGTTGGTATGTCGTCTTCTCGAGAGGGACAGAGGCCAT
N V F S C S V M H E A L H N H Y T Q K S L S L S P G>
_____  

FCΔC1 (A) _____ >
```

>NotI\_site  
|  
| 1450  
AATGAGCGGCCGC  
TTACTCGCCGGCG  
K \*->  
458  
\_\_\_\_\_  
>

Figure 22A

>EcoRI\_site

10	20	30	40	50	60	70	80
AAGCTTGGCTGCAGTCGATCGACTCTAGAGGATCGATCCCCGGCGAGCTCGAATTCCAAACCATGGTCAGCTAC							
TTCGAACCGACGTCCAGCTAGCTGAGATCTCCTAGCTAGGGCCGCTCGAGCTTAAGCGTTGGTGGTACCAAGTCGATG							
M V S Y>							
1 4							
>							

>BspEI\_bridge

90	100	110	120	130	140	150	160
TGGGACACCGGGGCTCTGCTGCGCGCTGCTCAGCTGTCTCACAGGATCTAGTTCCGGAGGTAGACCTTCG							
ACCCCTGTGCCCGCAGGACGACACGCGCGACGAGTCGACAGACGAAGAGTGTCTTAGATCAAGGCTCCATCTGGAAGCA							
W D T G V L L C A L L S C L L L T G S S>							
<u>FLT1 SIGNAL SEQUENCE</u> >							
S G>							
>							
G R P F V>							
31							
>							

170      180      190      200      210      220      230      240

AGAGATGTACAGTGAAATCCCCGAAATTATACACATGACTGAAGGAAGGGAGCTCGTCATTCCTGCCGGGTTACGTAC							
TCTCTACATGTCACTTTAGGGCTTAAATATGTGACTGACTTCCTCCCTCGAGCAGTAAGGGACGGCCCAATGCACTG							
E M Y S E I P E I I H M T E G R E L V I P C R V T S>							
57							
<u>FLT1 IG DOMAIN 2</u> >							

250      260      270      280      290      300      310      320

CTAACATCACTGTTACTTTAAAAAGTTTCCACTTGACACTTGTGATGGAAAACGATAATCTGGGACAGTACA							
GATTGTAGTGACAATGAAATTCTCAAAGGTGAACTGTGAAACTAGGGACTACCTTTGCGTATTAGACCCTGTCATCT							
P N I T V T L K K F P L D T L I P D G K R I I W D S R>							
84							
<u>FLT1 IG DOMAIN 2</u> >							

330      340      350      360      370      380      390      400

AAGGGCTTCATCATATCAAATGCAACGTACAAAGAAATAGGGCTCTGACCTGTGAAGCAACAGTCATGGCATTGTA							
TTCCCGAAGTAGTATAGTTACGTTGCATGTTCTTATCCCGAAGACTGGACACTTCGTTGTCAGTTACCGTAAACAT							
K G F I I S N A T Y K E I G L L T C E A T V N G H L Y>							
111							
<u>FLT1 IG DOMAIN 2</u> >							

410      420      430      440      450      460      470      480

TAAGACAAACTATCTCACACATCGACAAACCAATACAATCATAGATATCCAGCTGTTGCCAGGAAGTCGCTGGAGCTGC							
ATTCTGTTGATAGAGTGTGAGCTGTTGGTTATGTTAGTATCTATAGGTGACAAACGGTCCTTCAGCGACCTCGACG							
K T N Y L T H R Q T N T I I D>							
<u>FLT1 IG DOMAIN 2</u> >							
I Q L L P R K S L E L>							
137							
<u>VEGFR3 (FLT4) IG DOMAIN 3</u> >							

Figure 22B

490        500        510        520        530        540        550        560

TGGTAGGGAGAAGCTGGTCCTCAACTGCACCGTGTGGCTGAGTTAACCTCAGGTGTACCCCTTGACTGGACTACCCA  
ACCATCCCCCTTCGACCAGGAGTTGACGTGGCACACCCGACTCAAATTGAGTCCACAGTGGAAACTGACCCGTATGGGT  
L V G E K L V L N C T V W A E F N S G V T F D W D Y P> 164

VEGFR3 (FLT4) IG DOMAIN 3 >

570        580        590        600        610        620        630        640

GGGAAGCAGGGAGAGCGGGTAAGTGGGTGCCGAGCGACGCTCCAAACAGACCCACACAGAACTCTCCAGCATCTGAC  
CCCTTCGTCGTCTGCCCATTCACCCACGGGCTCGCTGCGAGGGTTGCTGGGTGTGAGAGGTGCTAGGACTGAGGACTG  
G K Q A E R G K W V P E R R S Q Q T H T E L S S I L T> 191

VEGFR3 (FLT4) IG DOMAIN 3 >

650        660        670        680        690        700        710        720

CATCCACAAACGTCAAGCCAGCACGACCTGGGCTCGTATGTGTGCAAGGCCAACAAACGGCATCCAGCGATTTCGGGAGAGCA  
GTAGGTGTGAGTCGGTGTGCTGACCCGAGCATACACAGTCGGGTGTTGCCGTAGGTGCTAAAGCCCTCTCGT  
I H N V S Q H D L G S Y V C K A N N G I Q R F R E S> 217

VEGFR3 (FLT4) IG DOMAIN 3 >

730        740        750        760        770        780        790        800

CCGAGGTCAATTGTGCATGAAAATGGCCCGGGCGACAAAAACTCACACATGCCAACCGTGGCCAGCACCTGAACCTCTGGG  
GGCTCCAGTAACACGTACTTTACCGGGCCCGCTGTTTGAGTGTGTACGGGTGGCACGGGTCTGGACTTGAGGACCCC  
T E V I V H E N>

VEGFR3 (FLT4) IG >

G P G>

D K T H T C P P C P A P E L L G> 244

FCΔC1 - A ALLOTYPE >

810        820        830        840        850        860        870        880

GGACCGTCAGTCTCCTCTTCCCCAAAACCAAGGACACCCCTCATGATCTCCGGACCCCTGAGGTACATGCGTGGT  
CCTGGCAGTCAGAAGGAGAAGGGGGTTTGGGCTGTGGAGTACTAGAGGGCTGGGACTCCAGTGTACGCACCA  
G P S V F L F P P K P K D T L M I S R T P E V T C V V> 271

FCΔC1 - A ALLOTYPE >

890        900        910        920        930        940        950        960

GGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGGACGGCTGGAGGTGCATAATGCCAAGACAA  
CCACCTGCACTCGGTGCTCTGGACTCCAGTCAAGTTGACCATGCACCTGCCAACCTCCACGTATTACGGTTCTGTT  
V D V S H E D P E V K F N W Y V D G V E V H N A K T> 297

FCΔC1 - A ALLOTYPE >

970        980        990        1000        1010        1020        1030        1040

AGCCGGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGCGTCTCACCGTCTGCCACCAGGACTGGCTGAATGGC  
TCGGCGCCCTCTCGTCATGTTGTCGTGCATGCCACACCAAGTGGCAGGAGTGGCAGGACGTGGCTCTGACCGACTACCG  
K P R E E Q Y N S T Y R V V S V L T V L H Q D W L N G> 324

FCΔC1 - A ALLOTYPE >

Figure 22C

351

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FCAC1 - A ALLOTYPE >

>A>C\_A\_allotype

|

>G>T\_A\_allotype

|

|

377

---

FCAC1 - A ALLOTYPE >

404

---

FCAC1 - A ALLOTYPE >

>T>C

|

431

---

FCAC1 - A ALLOTYPE >

>NotI\_site

|

455

---

FCAC1 - A ALLOTYPE >

CCGC  
GGCG

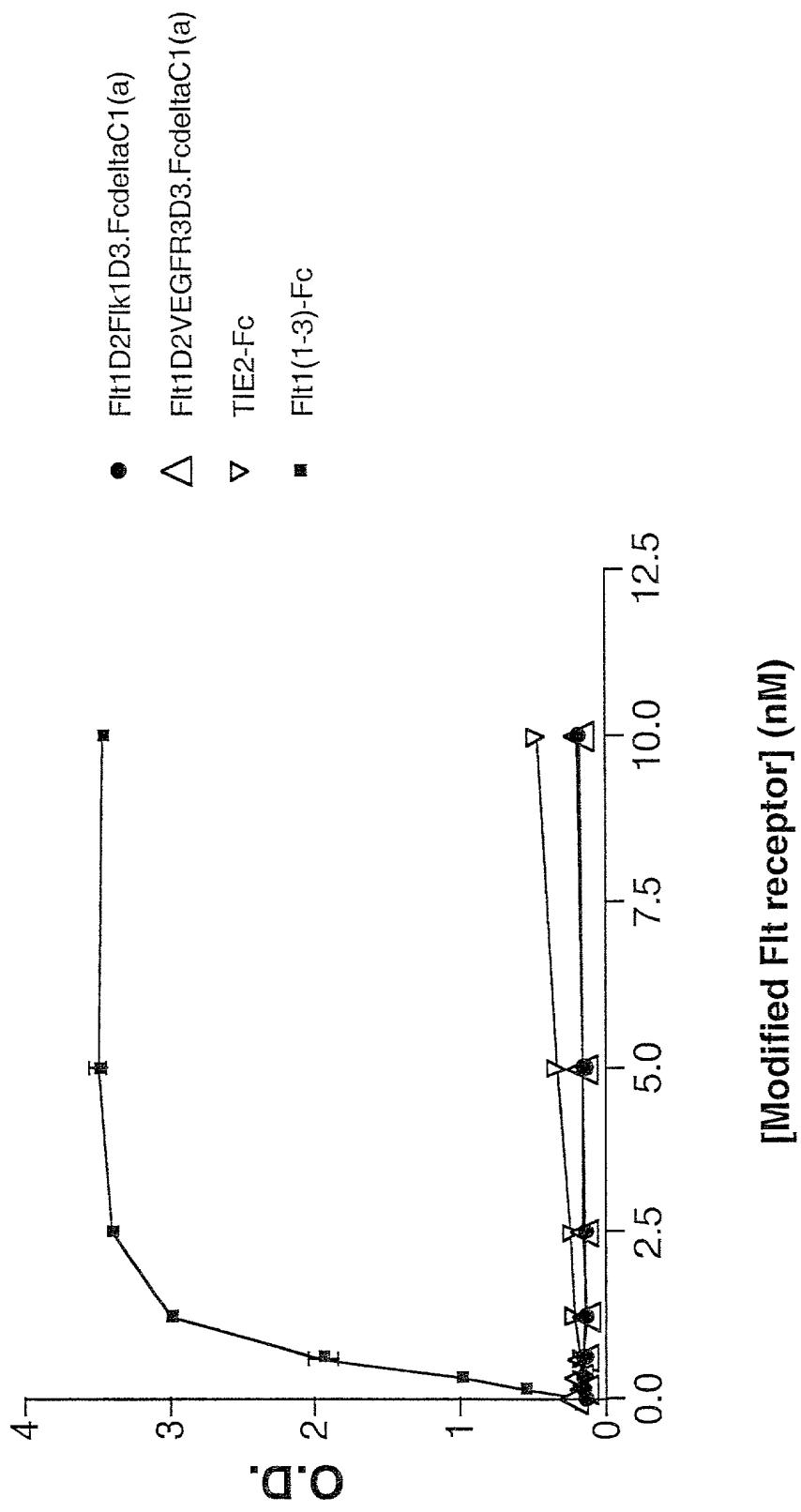
**Figure 23**

Figure 24A

10            20            30            40            50            60  
 \*            \*            \*            \*            \*            \*

ATG GTC AGC TAC TGG GAC ACC GGG GTC CTG CTG TGC GCG CTG CTC AGC TGT CTG CTT CTC  
 TAC CAG TCG ATG ACC CTG TGG CCC CAG GAC GAC ACG CGC GAC GAG TCG ACA GAC GAA GAG  
 M V S Y W D T G V L L C A L L S C L L L>  
 1            5            hFLT1 SIGNAL SEQUENCE            15            20>

70            80            90            100            110            120  
 \*            \*            \*            \*            \*            \*

ACA GGA TCT AGT TCC GGA AGT GAT ACC GGT AGA CCT TTC GTA GAG ATG TAC AGT GAA ATC  
 TGT CCT AGA TCA AGG CCT TCA CTA TGG CCA TCT GGA AAG CAT CTC TAC ATG TCA CTT TAG  
 T G S S S G>  
 21\_hFLT1 SIGNAL SEQ\_26>

S D T G R P F V E M Y S E I>  
 27            30            hFLT1 IG DOMAIN 2            40>

130            140            150            160            170            180  
 \*            \*            \*            \*            \*            \*

CCC GAA ATT ATA CAC ATG ACT GAA GGA AGG GAG CTC GTC ATT CCC TGC CGG GTT ACG TCA  
 GGG CTT TAA TAT GTG TAC TGA CTT CCT TCC CTC GAG CAG TAA GGG ACG GCC CAA TGC AGT  
 P E I I H M T E G R E L V I P C R V T S>  
 41            45            hFLT1 IG DOMAIN 2            55            60>

190            200            210            220            230            240  
 \*            \*            \*            \*            \*            \*

CCT AAC ATC ACT GTT ACT TTA AAA AAG TTT CCA CTT GAC ACT TTG ATC CCT GAT GGA AAA  
 GGA TTG TAG TGA CAA TGA AAT TTT TTC AAA GGT GAA CTG TGA AAC TAG GGA CTA CCT TTT  
 P N I T V T L K K F P L D T L I P D G K>  
 61            65            hFLT1 IG DOMAIN 2            75            80>

250            260            270            280            290            300  
 \*            \*            \*            \*            \*            \*

CGC ATA ATC TGG GAC AGT AGA AAG GGC TTC ATC ATA TCA AAT GCA ACG TAC AAA GAA ATA  
 GCG TAT TAG ACC CTG TCA TCT TTC CCG AAG TAG TAT AGT TTA CGT TGC ATG TTT CTT TAT  
 R I I W D S R K G F I I S N A T Y K E I>  
 81            85            hFLT1 IG DOMAIN 2            95            100>

310            320            330            340            350            360  
 \*            \*            \*            \*            \*            \*

GGG CTT CTG ACC TGT GAA GCA ACA GTC AAT GGG CAT TTG TAT AAG ACA AAC TAT CTC ACA  
 CCC GAA GAC TGG ACA CTT CGT TGT CAG TTA CCC GTC AAC ATA TTC TGT TTG ATA GAG TGT  
 G L L T C E A T V N G H L Y K T N Y L T>  
 101            105            hFLT1 IG DOMAIN 2            115            120>

370            380            390            400            410            420  
 \*            \*            \*            \*            \*            \*

CAT CGA CAA ACC AAT ACA ATC ATA GAT GTG GTT CTG AGT CCG TCT CAT GGA ATT GAA CTA  
 GTA GCT GTT TGG TTA TGT TAG TAT CTA CAC CAA GAC TCA GGC AGA GTA CCT TAA CTT GAT  
 H R Q T N T I I D>  
 121            hFLT1 IG DOMAIN 2            129>

V V L S P S H G I E L>  
 130            hFLK1 IG DOMAIN 3            140>

Figure 24B

430            440            450            460            470            480  
 \*            \*            \*            \*            \*            \*

TCT GTT GGA GAA AAG CTT TTA AAT TGT ACA GCA AGA ACT GAA CTA AAT GTG GGG ATT  
 AGA CAA CCT CTT TTC GAA CAG AAT TTA ACA TGT CGT TCT TGA CTT GAT TTA CAC CCC TAA  
 S V G E K L V L N C T A R T E L N V G I>  
 141        145            hFLK1 IG DOMAIN 3        155            160>

490            500            510            520            530            540  
 \*            \*            \*            \*            \*            \*

GAC TTC AAC TGG GAA TAC CCT TCT TCG AAG CAT CAG CAT AAG AAA CTT GTA AAC CGA GAC  
 CTG AAG TTG ACC CTT ATG GGA AGA AGC TTC GTA GTC GTA TTC TTT GAA CAT TTG GCT CTG  
 D F N W E Y P S S K H Q H K K L V N R D>  
 161        165            hFLK1 IG DOMAIN 3        175            180>

550            560            570            580            590            600  
 \*            \*            \*            \*            \*            \*

CTA AAA ACC CAG TCT GGG AGT GAG ATG AAG AAA TTT TTG AGC ACC TTA ACT ATA GAT GGT  
 GAT TTT TGG GTC AGA CCC TCA CTC TAC TTC TTT AAA AAC TCG TGG AAT TGA TAT CTA CCA  
 L K T Q S G S E M K K F L S T L T I D G>  
 181        185            hFLK1 IG DOMAIN 3        195            200>

610            620            630            640            650            660  
 \*            \*            \*            \*            \*            \*

GTA ACC CGG AGT GAC CAA GGA TTG TAC ACC TGT GCA GCA TCC AGT GGG CTG ATG ACC AAG  
 CAT TGG GCC TCA CTG GTT CCT AAC ATG TGG ACA CGT CGT AGG TCA CCC GAC TAC TGG TTC  
 V T R S D Q G L Y T C A A S S G L M T K>  
 201        205            hFLK1 IG DOMAIN 3        215            220>

670            680            690            700            710            720  
 \*            \*            \*            \*            \*            \*

AAG AAC AGC ACA TTT GTC AGG GTC CAT GAA AAG GAC AAA ACT CAC ACA TGC CCA CCG TGC  
 TTC TTG TCG TGT AAA CAG TCC CAG GTA CTT TTC CTG TTT TGA GTG TGT ACG GGT GGC ACG  
 K N S T F V R V H E K>  
 221        hFLK1 IG DOMAIN 3        231>

D	K	T	H	T	C	P	P	C>
232								240>

730            740            750            760            770            780  
 \*            \*            \*            \*            \*            \*

CCA GCA CCT GAA CTC CTG GGG GGA CCG TCA GTC TTC CTC TTC CCC CCA AAA CCC AAG GAC  
 GGT CGT GGA CTT GAG GAC CCC CCT GGC AGT CAG AAG GAG AAG GGG GGT TTT GGG TTC CTG  
 P A P E L L G G P S V F L F P P K P K D>  
 241        245            hFCAC1 A        255            260>

790            800            810            820            830            840  
 \*            \*            \*            \*            \*            \*

ACC CTC ATG ATC TCC CGG ACC CCT GAG GTC ACA TGC GTG GTG GTG GAC GTG AGC CAC GAA  
 TGG GAG TAC TAG AGG GCC TGG GGA CTC CAG TGT ACG CAC CAC CAC CTG CAC TCG GTG CTT  
 T L M I S R T P E V T C V V V D V S H E>  
 261        265            hFCAC1 A        275            280>

850            860            870            880            890            900  
 \*            \*            \*            \*            \*            \*

GAC CCT GAG GTC AAG TTC AAC TGG TAC GTG GAC GGC GTG GAG GTG CAT AAT GCC AAG ACA  
 CTG GGA CTC CAG TTC AAG TTG ACC ATG CAC CTG CCG CAC CTC CAC GTA TTA CGG TTC TGT  
 D P E V K F N W Y V D G V E V H N A K T>  
 281        285            hFCAC1 A        295            300>

Figure 24C

910            920            930            940            950            960  
 \*            \*            \*            \*            \*            \*

AAG CCG CGG GAG GAG CAG TAC AAC AGC ACG TAC CGT GTG GTC AGC GTC CTC ACC GTC CTG  
 TTC GGC GCC CTC CTC GTC ATG TTG TCG TGC ATG GCA CAC CAG TCG CAG GAG TGG CAG GAC  
 K P R E E Q Y N S T Y R V V S V L T V L>  
 301            305            hFCAC1 A            315            320>

970            980            990            1000            1010            1020  
 \*            \*            \*            \*            \*            \*

CAC CAG GAC TGG CTG AAT GGC AAG GAG TAC AAG TGC AAG GTC TCC AAC AAA GCC CTC CCA  
 GTG GTC CTG ACC GAC TTA CCG TTC CTC ATG TTC ACG TTC CAG AGG TTG TTT CGG GAG GGT  
 H Q D W L N G K E Y K C K V S N K A L P>  
 321            325            hFCAC1 A            335            340>

1030            1040            1050            1060            1070            1080  
 \*            \*            \*            \*            \*            \*

GCC CCC ATC GAG AAA ACC ATC TCC AAA GCC AAA GGG CAG CCC CGA GAA CCA CAG GTG TAC  
 CGG GGG TAG CTC TTT TGG TAG AGG TTT CGG TTT CCC GTC GGG GCT CTT GGT GTC CAC ATG  
 A P I E K T I S K A K G Q P R E P Q V Y>  
 341            345            hFCAC1 A            355            360>

1090            1100            1110            1120            1130            1140  
 \*            \*            \*            \*            \*            \*

ACC CTG CCC CCA TCC CGG GAT GAG CTG ACC AAG AAC CAG GTC AGC CTG TGC CTG GTC  
 TGG GAC GGG GGT AGG GCC CTA CTC GAC TGG TTC TTG GTC CAG TCG GAC TGG AGC GAC CAG  
 T L P P S R D E L T K N Q V S L T C L V>  
 361            365            hFCAC1 A            375            380>

1150            1160            1170            1180            1190            1200  
 \*            \*            \*            \*            \*            \*

AAA GGC TTC TAT CCC AGC GAC ATC GCC GTG GAG TGG GAG AGC AAT GGG CAG CCG GAG AAC  
 TTT CCG AAG ATA GGG TCG CTG TAG CGG CAC CTC ACC CTC TCG TTA CCC GTC GGC CTC TTG  
 K G F Y P S D I A V E W E S N G Q P E N>  
 381            385            hFCAC1 A            395            400>

1210            1220            1230            1240            1250            1260  
 \*            \*            \*            \*            \*            \*

AAC TAC AAG ACC ACG CCT CCC GTG CTG GAC TCC GAC GGC TCC TTC TTC CTC TAC AGC AAG  
 TTG ATG TTC TGG TGC GGA GGG CAC GAC CTG AGG CTG CCG AGG AAG AAG GAG ATG TCG TTC  
 N Y K T T P P V L D S D G S F F L Y S K>  
 401            405            hFCAC1 A            415            420>

1270            1280            1290            1300            1310            1320  
 \*            \*            \*            \*            \*            \*

CTC ACC GTG GAC AAG AGC AGG TGG CAG CAG GGG AAC GTC TTC TCA TGC TCC GTG ATG CAT  
 GAG TGG CAC CTG TTC TCG ACC GTC GTC CCC TTG CAG AAG AGT ACG AGG CAC TAC GTC  
 L T V D K S R W Q Q G N V F S C S V M H>  
 421            425            hFCAC1 A            435            440>

1330            1340            1350            1360            1370  
 \*            \*            \*            \*            \*

GAG GCT CTG CAC AAC CAC TAC ACG CAG AAG AGC CTC TCC CTG TCT CCG GGT AAA TGA  
 CTC CGA GAC GTG TTG GTG ATG TGC GTC TTC TCG GAG AGG GAC AGA GGC CCA TTT ACT  
 E A L H N H Y T Q K S L S L S P G K \*>  
 441            445            hFCAC1 A            455            458 >

Figure 25B

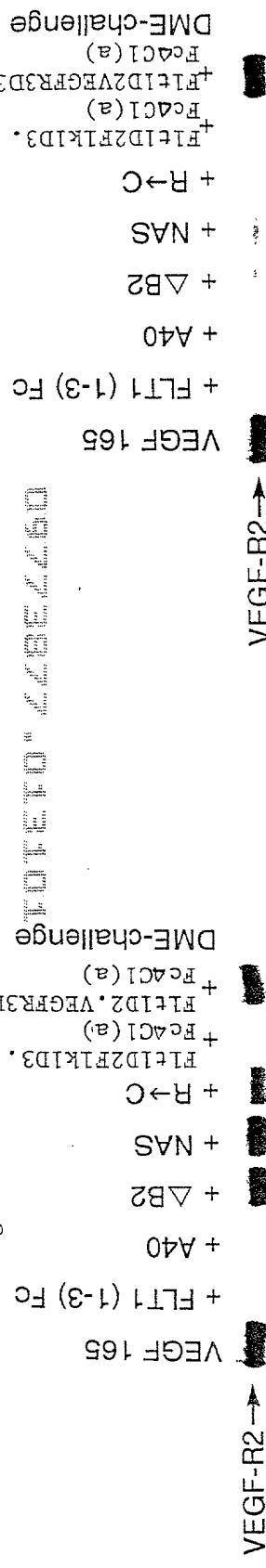


Figure 25A

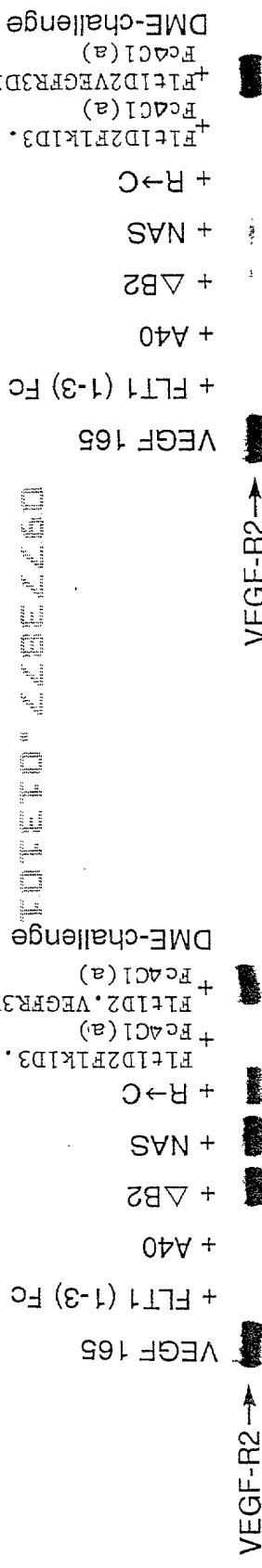


Figure 25C

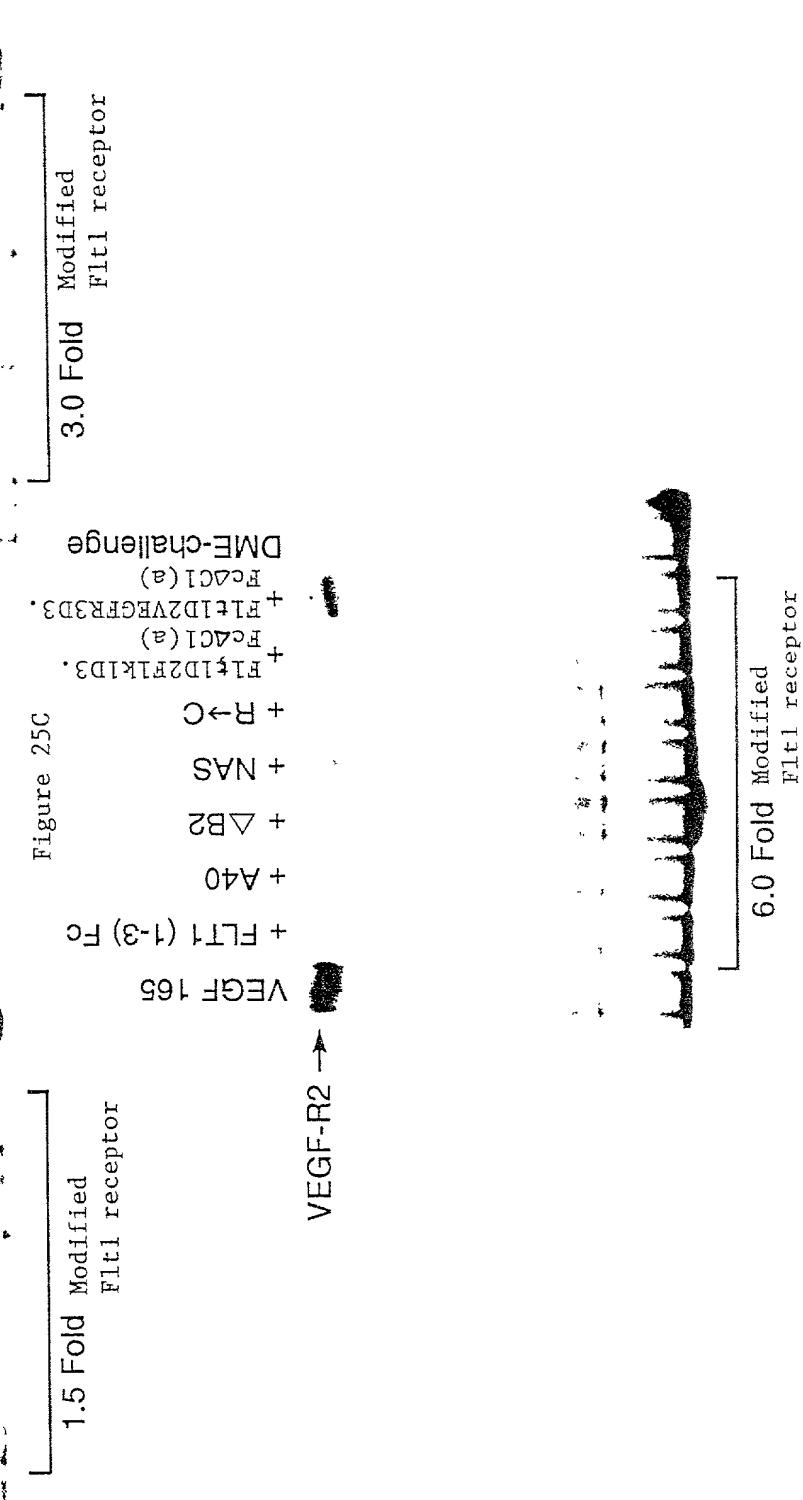


Figure 26B

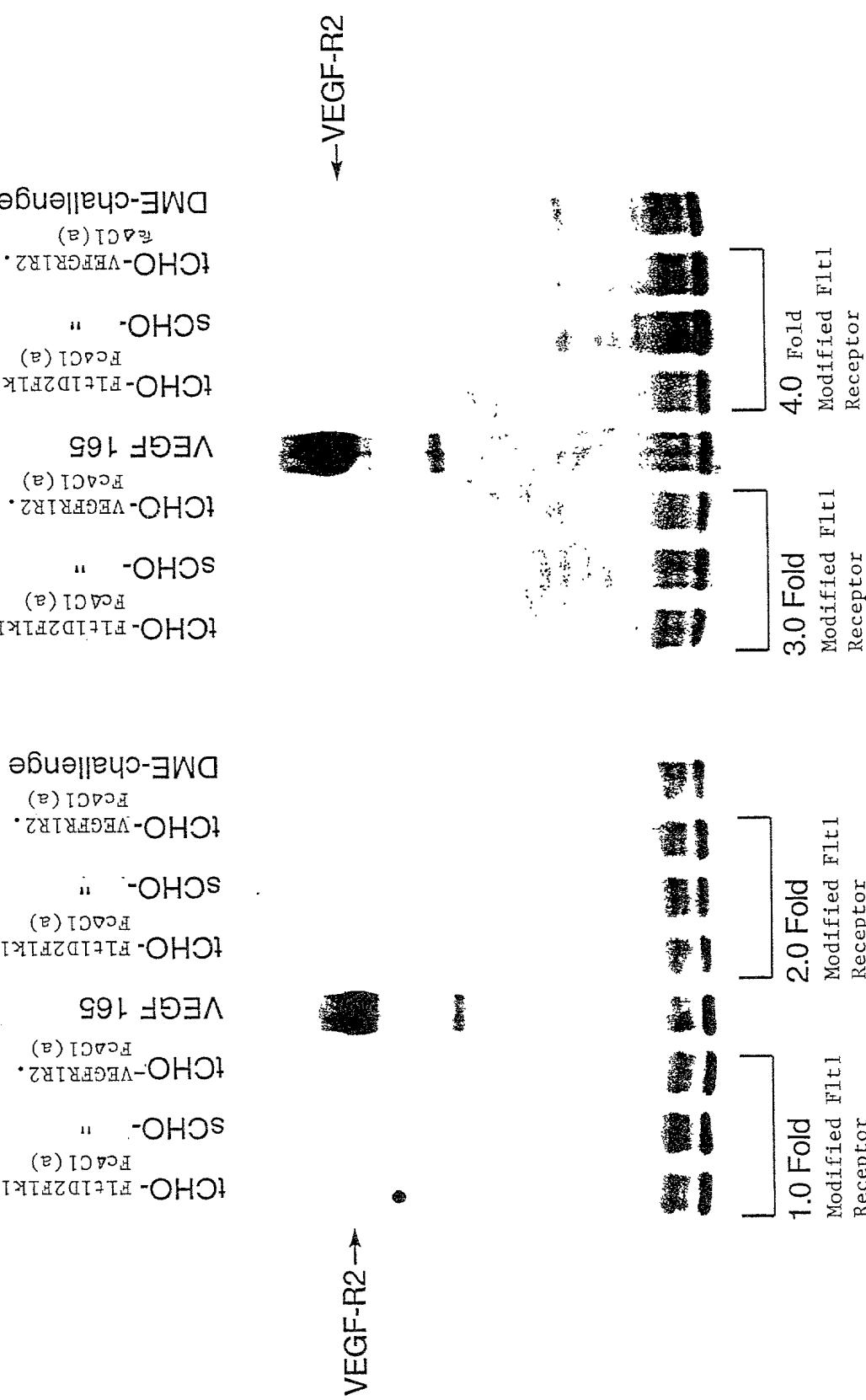


Figure 27

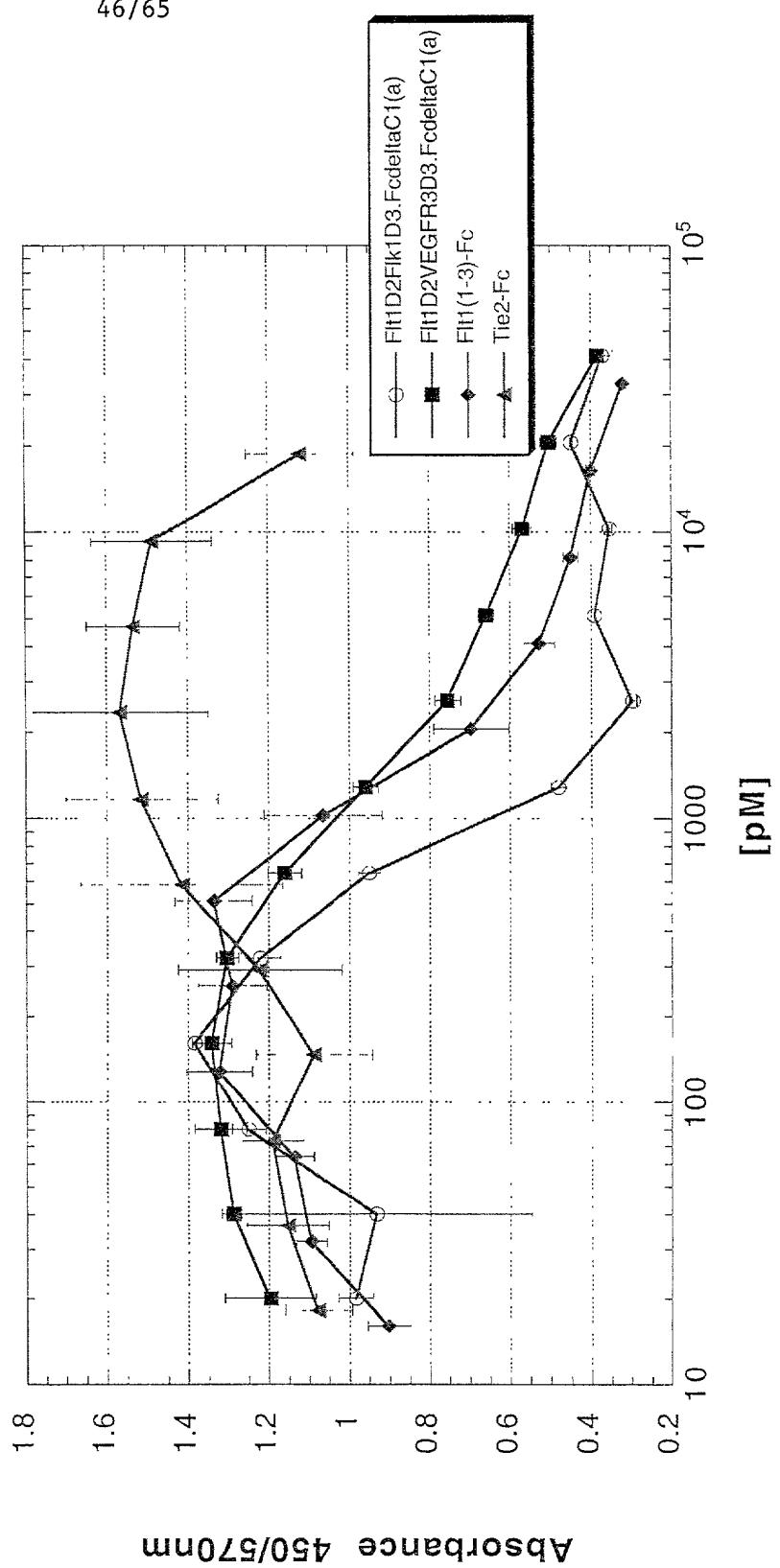


Figure 28

Binding Stoichiometry of hVEGFR165 to F1t1D2F1k1D3.FcAC1 (a) & VEGFR1R2-Fc4C1 (a)	
hVEGFR165 (nM)	VEGF / F1t1D2F1k1D3 .FcAC1 (a)
1	0.93
10	0.97
50	1
Average±StDev	0.96±0.03
	0.97±0.02

Figure 29

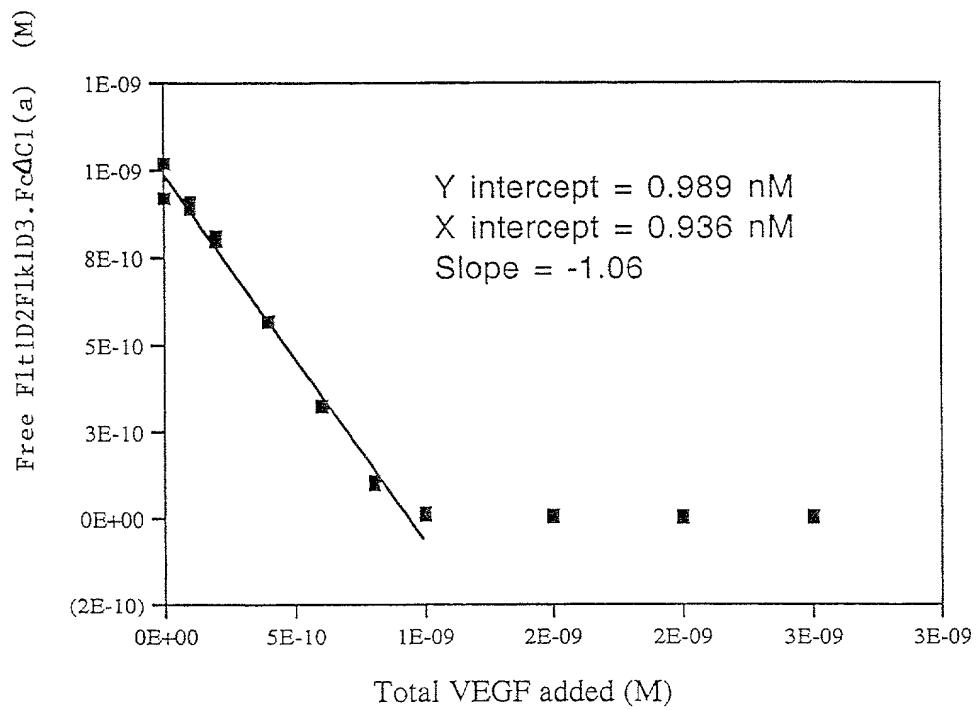


Figure 30

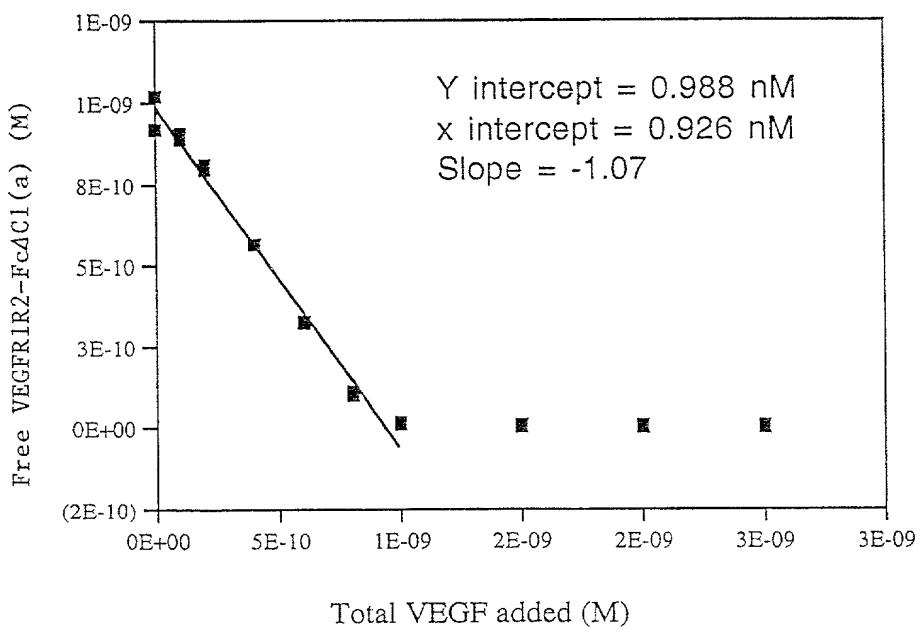


Figure 31

Instrumentation and Methods

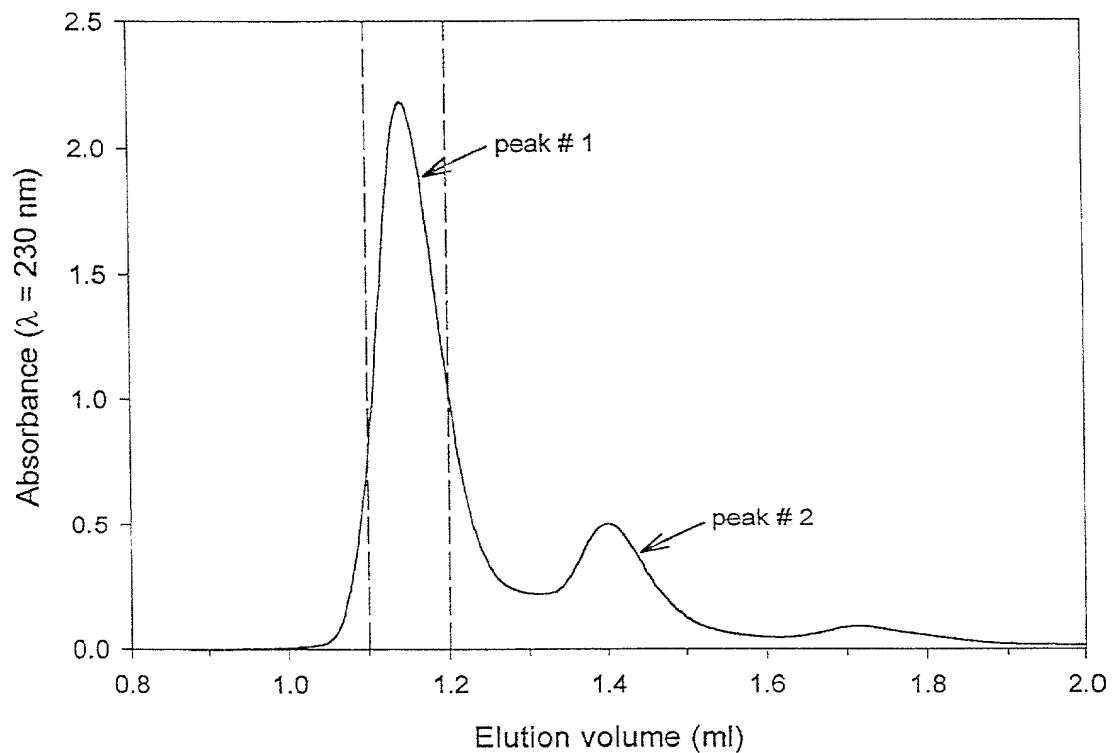


Figure 32

PROTEIN SEPARATION

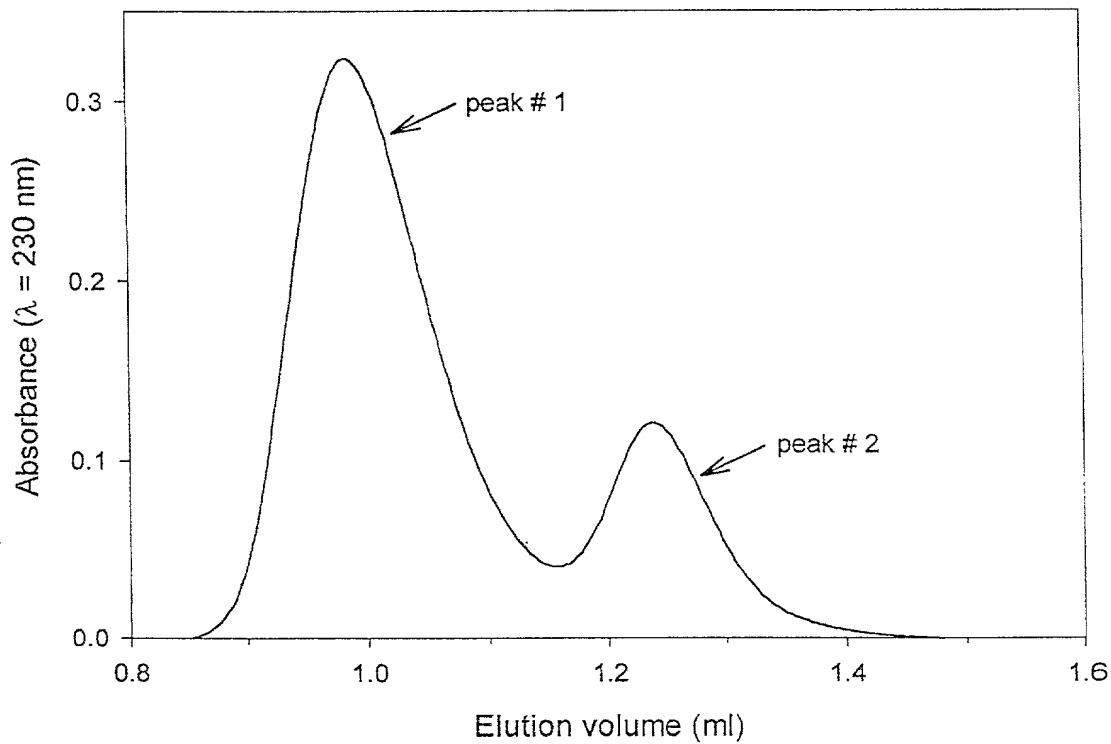


Figure 33

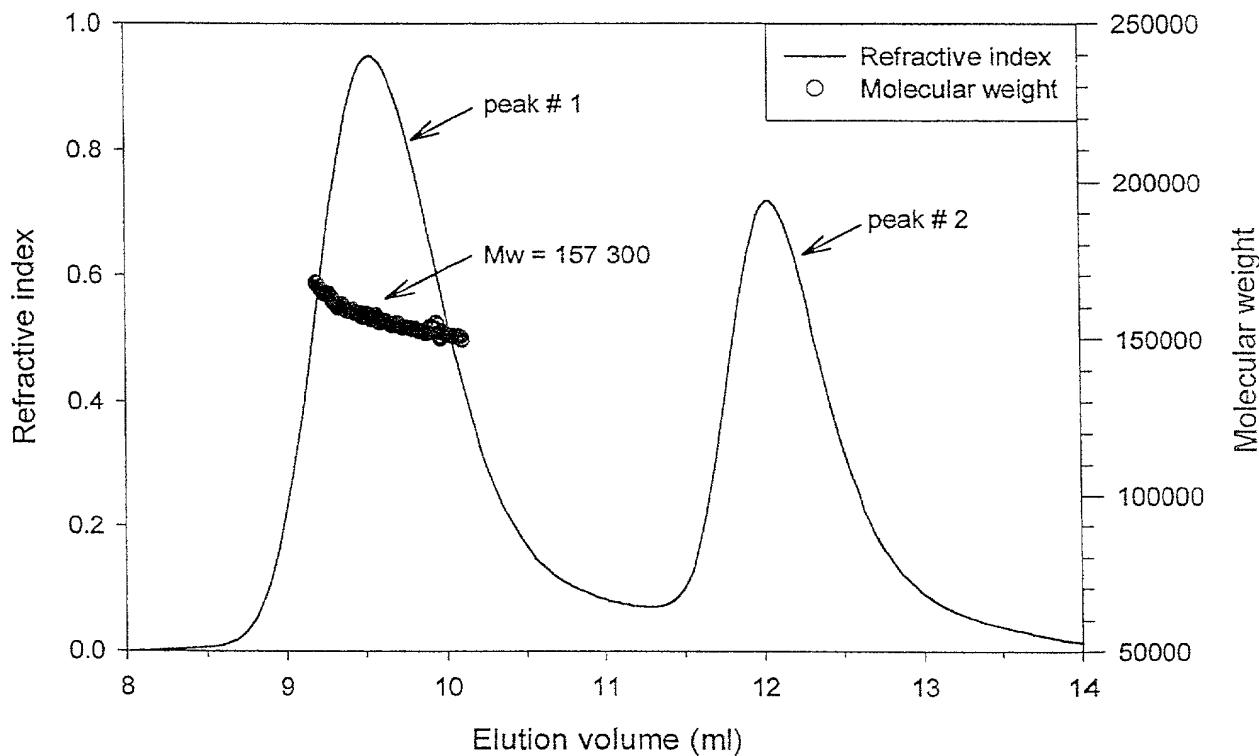


Figure 34

Instrumental parameters:  $\eta = 0.001$ ,  $[\eta] = 0.001$ ,  $[\eta]_0 = 0.001$ ,  $d = 0.001$ ,  $d' = 0.001$

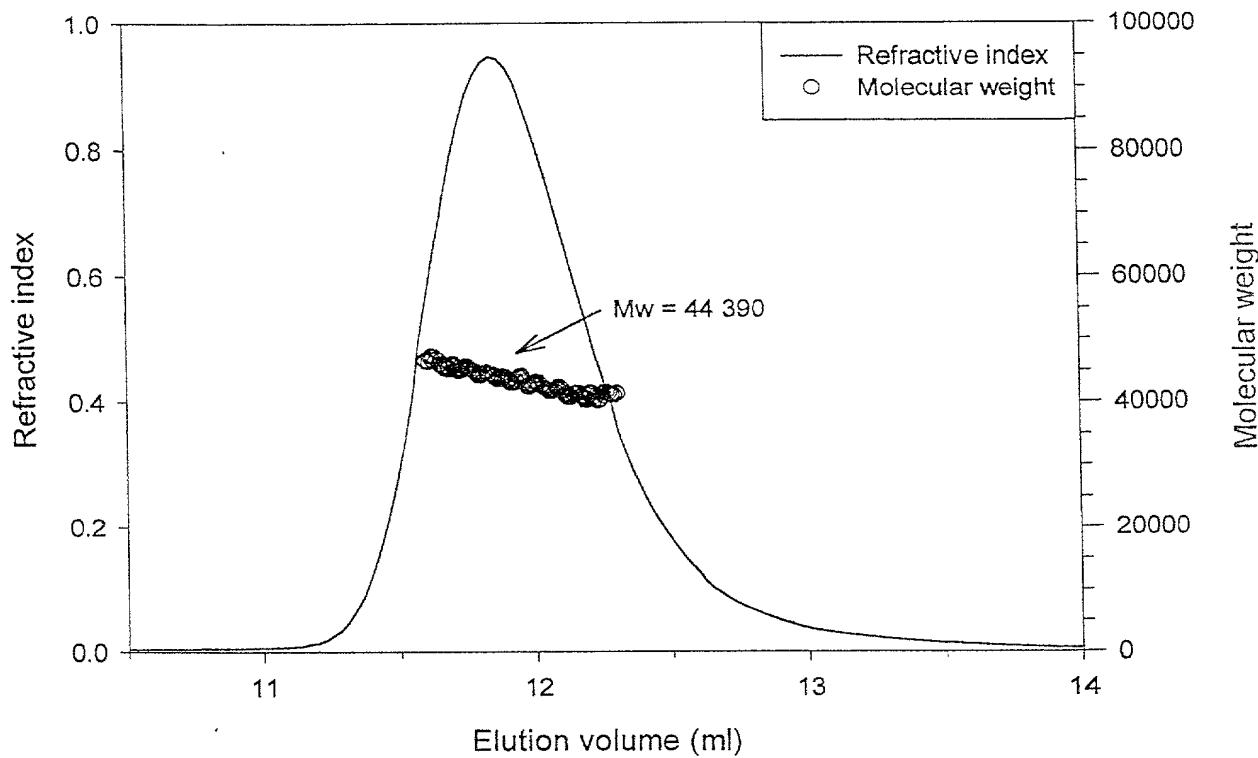


Figure 35

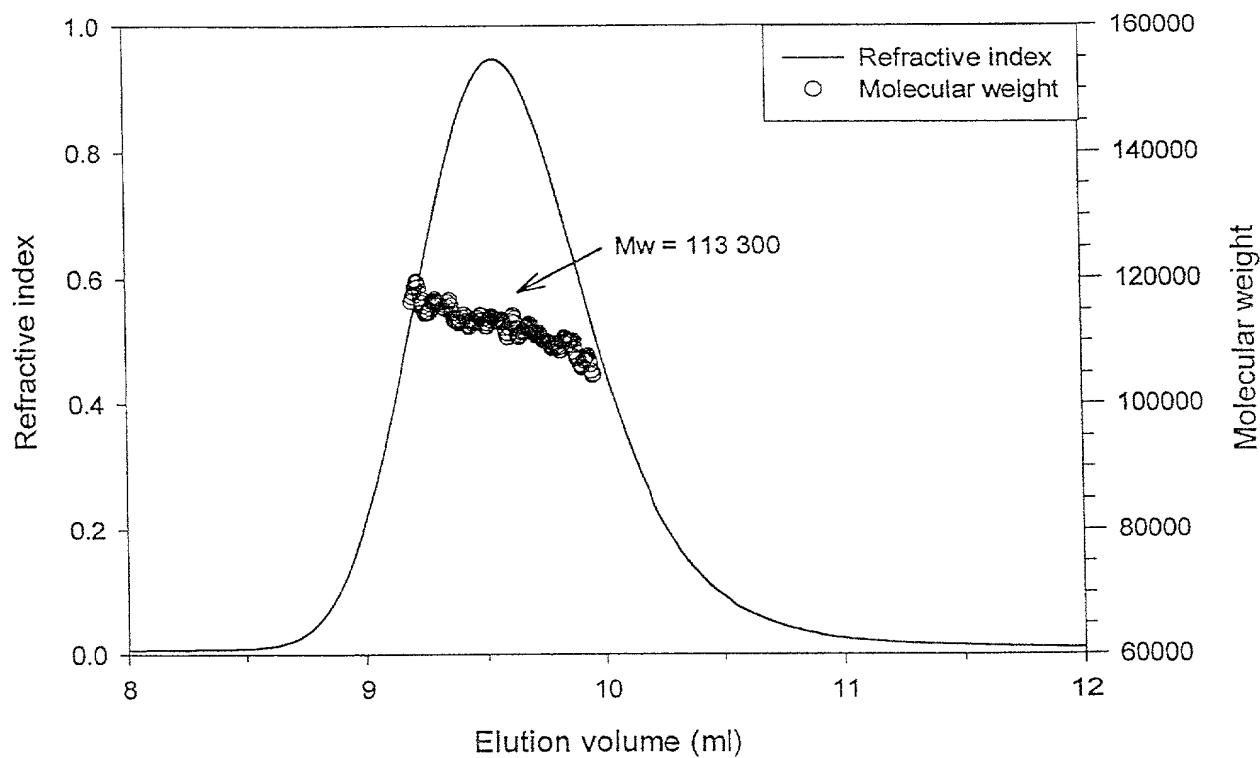


Figure 36

GRPFVEMYSEIPEIHMTEGRELVIPCRVTSPNITVTLKKFPLDTLIPDG  
 KRIWDSRKGFISNATYKEIGLLTCEA TVNGHLYKTNYLTHRQTNTID  
 VVLSPSPSHGIELSVGEKLVLNCTARTELNVGIDFNWEYPSSKHHQHKKLVNR  
 DLKTFQSGSEM**K**FLSTLTIDGVTRSDQGLYTCAASSGLMTKKNSTFVRVH  
 EKGPGDKTHTCPPCPAPELLGGPSVFLFPKPKDTLMISRTPEVTCVVVD  
 CXI  
 VSHEDPEVKFNWYVDGVEVHNAAKTKPREEQYNSTYRVVSVLTVLHQDWLN  
 GKEYKCKVSNKALPAPIEKTISKAGQPREPQVYTLPPSRDIELTKNQVSL  
 TCLVKGFYPSDIAVIEWESNGQPENNYKIRTPPVLDSDGSFFLYSKLTVDKS  
 RWQQGNVFSCSVMIHEALHNHYTQKSLSSLSPGK

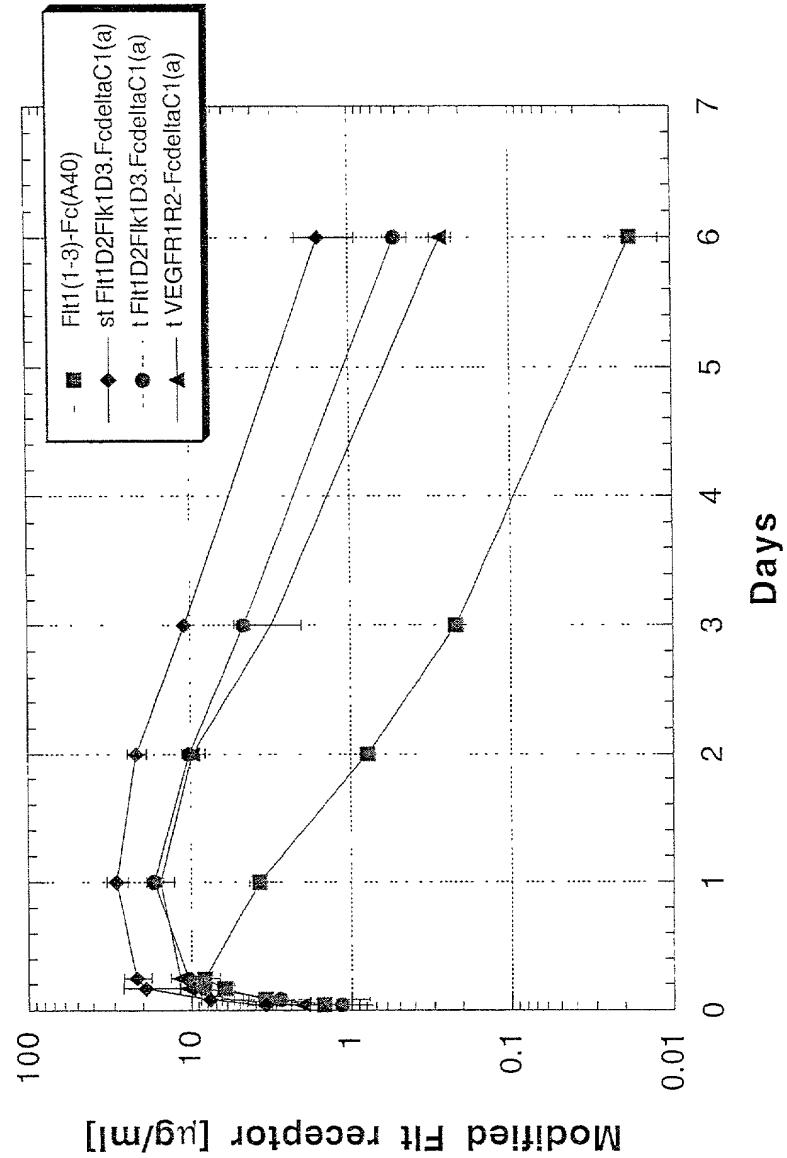
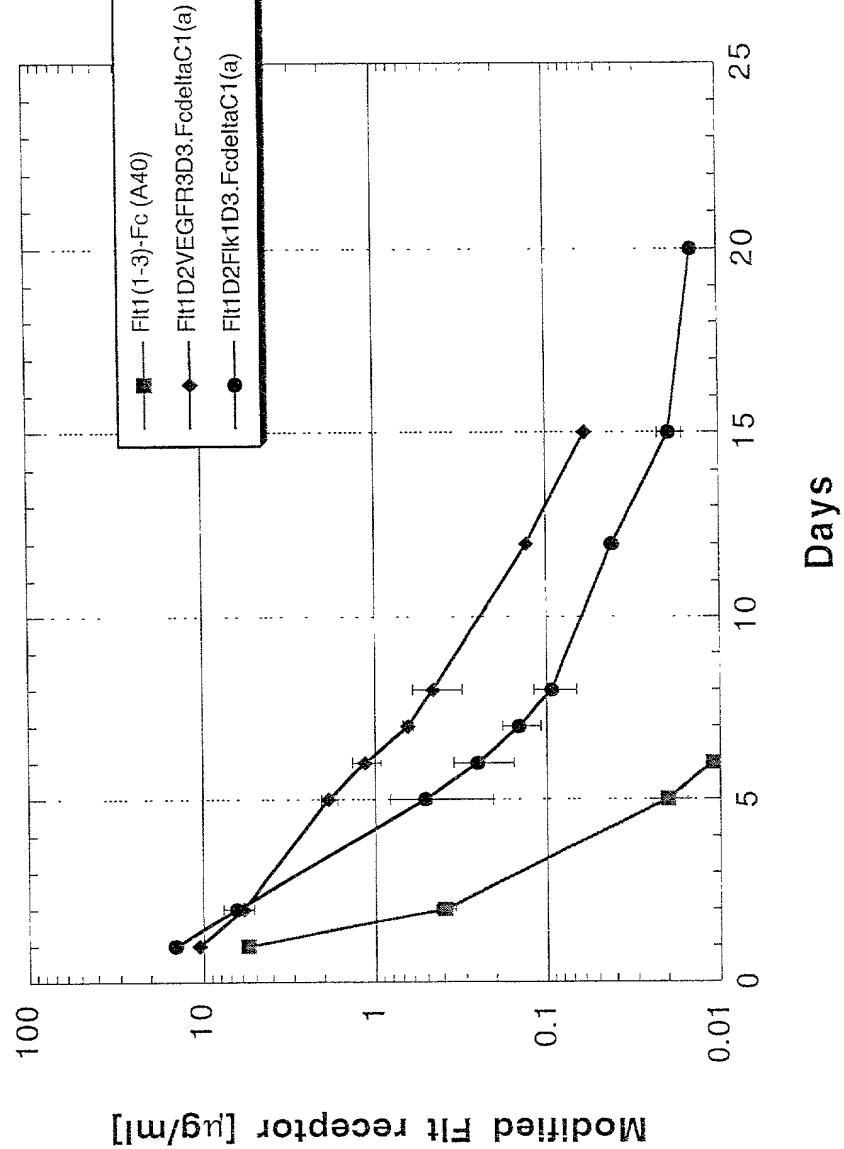
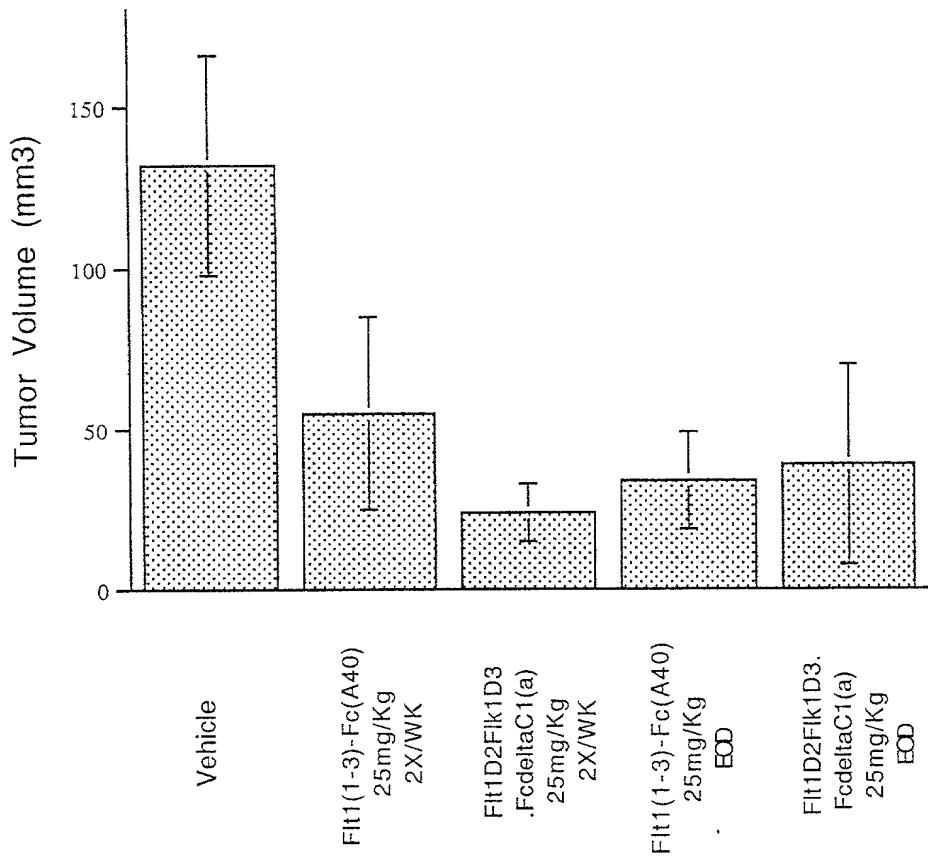
**Figure 37**

Figure 38



**Figure 39**

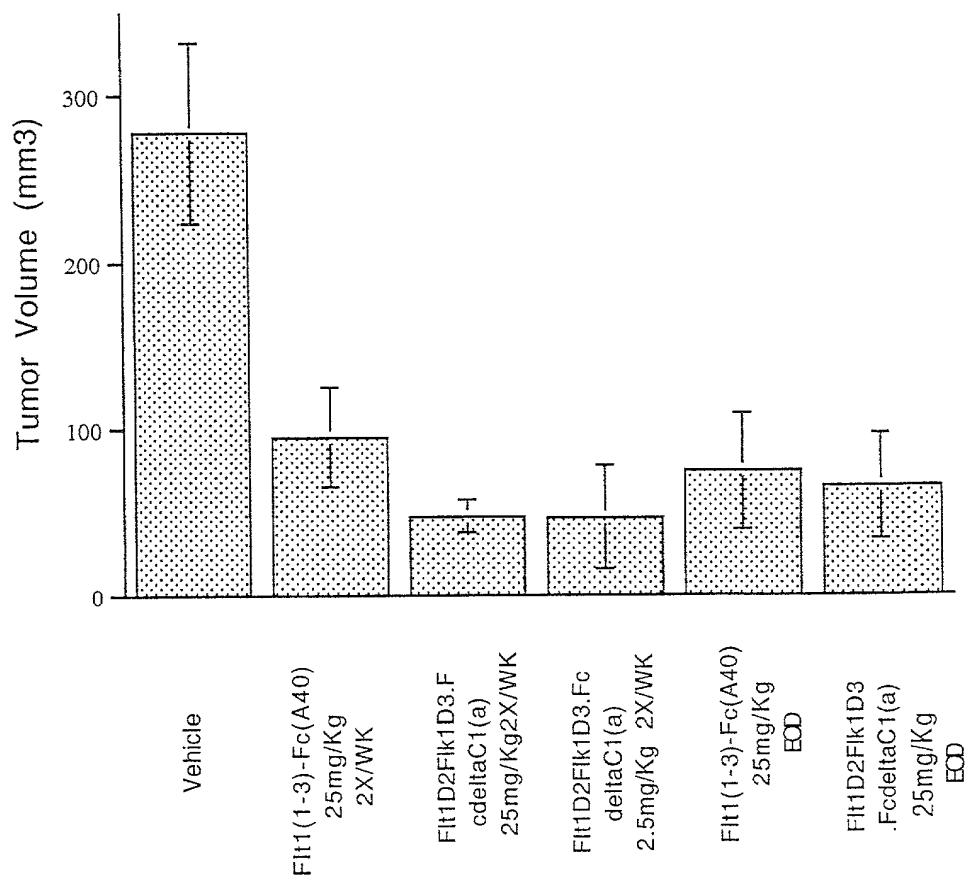
**Figure 40**

Figure 41

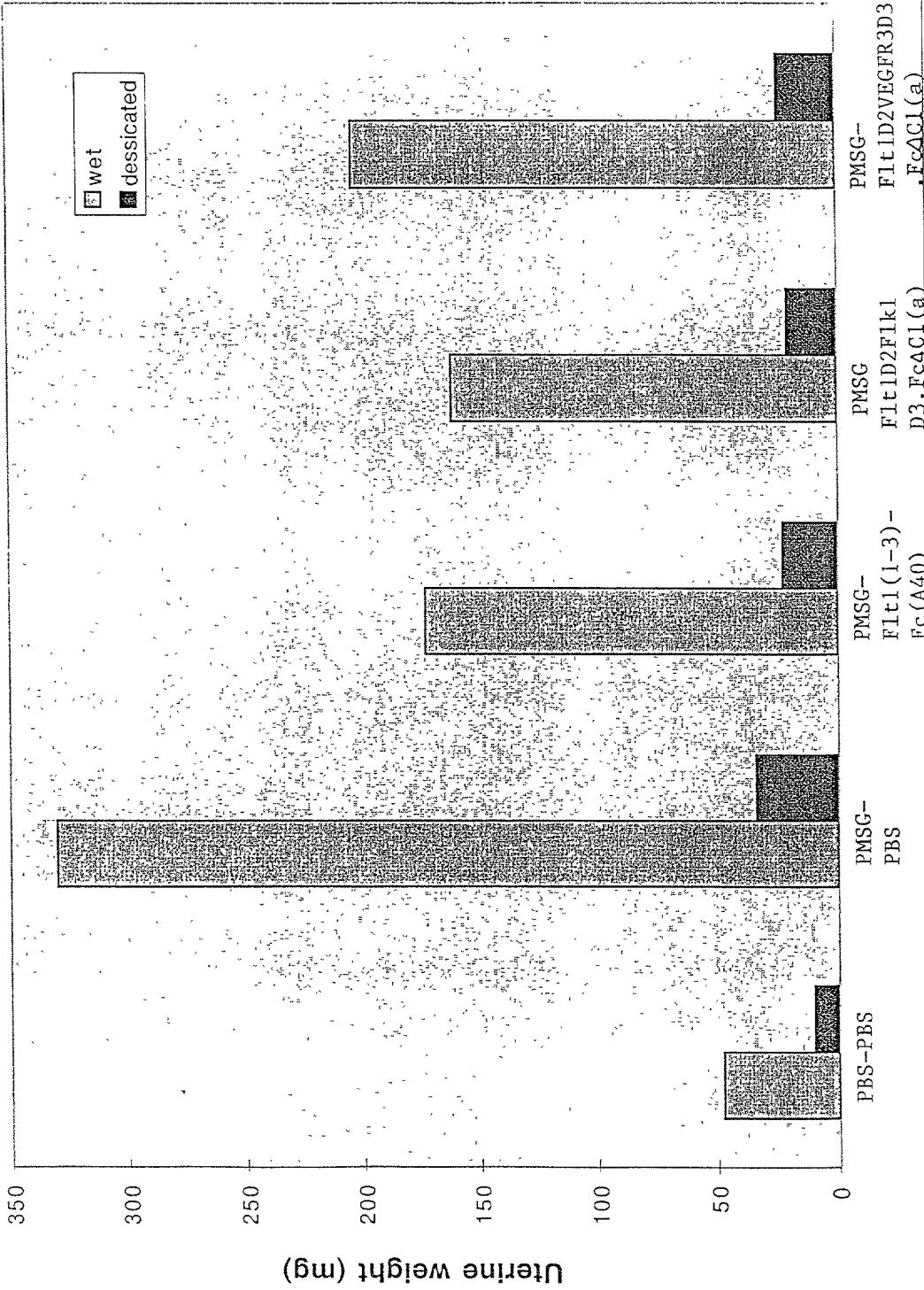


Figure 42A

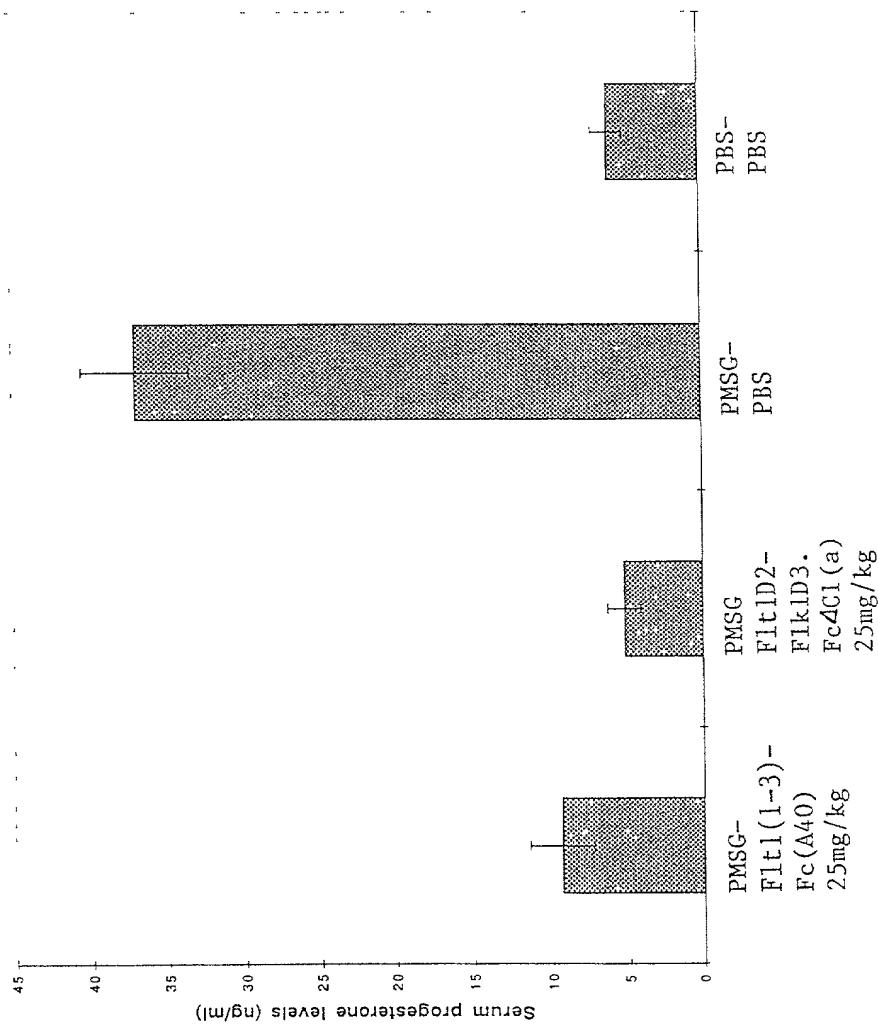


Figure 42B

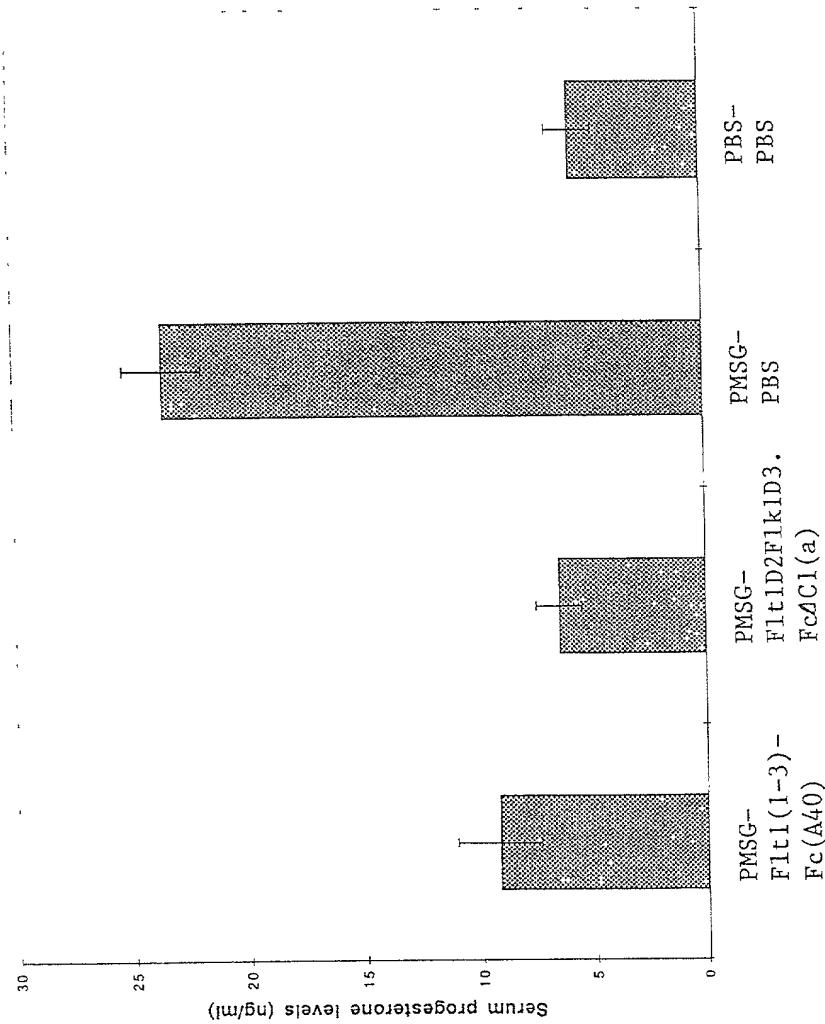




Fig.43

Fig.44B

Fig.44C



Fig.44A

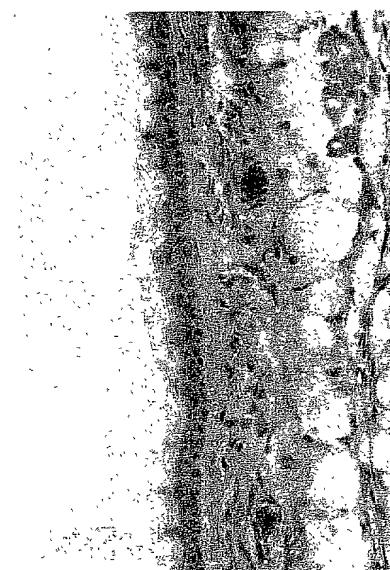


Fig.45

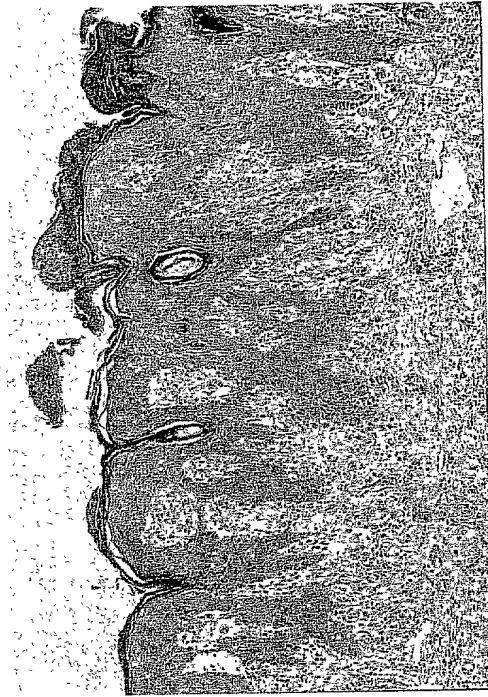


Fig.46 A-B

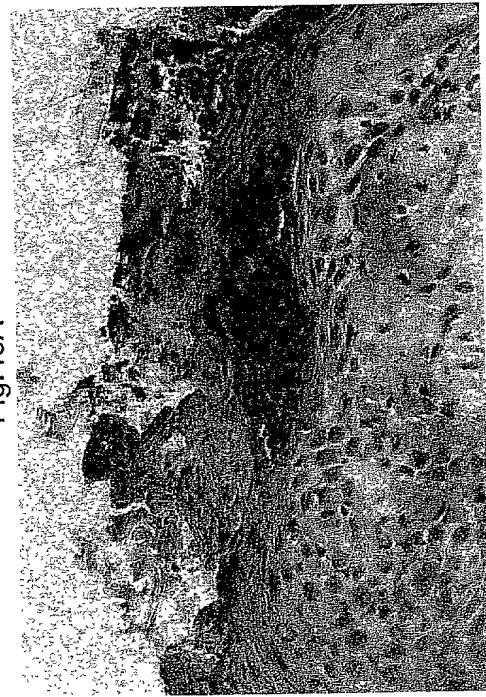


Fig.46A

Fig.46B

